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ART. I.—*A System of Universal Science.—Introduction: Considerations on the Divisions of Human Knowledge; and on the Classification and Nomenclature of the Sciences.* Philadelphia, 1816. 4to. pp. 371.

THE author of this work appears to be wholly adverse to system, and, at the same time, more enamoured of system than almost any other writer. In proof of the first part of this paradox, we advert to the fact, that the volume before us contains three hundred and seventy-one pages, which are divided neither into preliminary dissertations, nor essays, nor chapters; so that the reader is denied the privilege of all those resting places which, in large books, have hitherto been systematically afforded him. He gives us, indeed, preliminaries; but they are all mingled, here and there, with the alternations of the analytic and synthetic exhibition of his system. He records nine laws, by which we are to ascertain whether his system is a good one; divides all human knowledge into three provinces; gives us more preliminaries; proceeds to fix a specific termination for the names of his sciences; constructs his nomenclature for the subdivisions of the first province; and then, under the marginal notice of digression, introduces ten more preliminary pages, before he develops the remainder of his ‘catholepistemia.’ Besides, men not inimical to system let the public know, from the first page of a book, who its author is; but this child of genius permits us to guess the name of its father until the hour of expiration comes; in which we are informed, by way of climax, or catastrophe,—and the learned can scarcely say which,—that ‘The supreme court of the territory of Michigan commences its annual session on the sixteenth day of September; and there remains barely time for the performance of the journey.—A. E. B. WOODWARD.—Philadelphia, August 31st, 1816.’ When the magical arts shall be revived, we

shall probably learn what connexion the session of the court of Michigan has with 'A System of Universal Science;' and shall then see, too, the reason of preferring this epistolary conclusion of a volume, to the ordinary mode of stating, in a title page, that this book is written 'By A. E. B. Woodward, judge of the supreme court of the territory of Michigan.'

In proof of the latter part of the introductory paradox, we cite every page of the book under review, as well as the testimony of judge Woodward himself,—'that he has devoted a great part of his life to the systematization of human knowledge.' It is strange, that the long and highly cultivated love of method, which the writer evinces, should not have induced him to adhere to something like system in the arrangement and discussion of the important topics treated of in the production on our table.

It is another peculiarity of our author to decline 'the quotation of authorities, and the acknowledgment of the passages, or of the expressions borrowed, or imitated,'—from a fanciful regard to a beautiful page, or 'an unbroken text.' Hence every reader must depend either upon his previous knowledge of writers, alluded to in the historical part of the work, or rely implicitly upon judge Woodward's opinions of his concealed authorities. We are informed that the Chinese maintained some principles of moral philosophy,—that lord Verulam taught certain things,—and that Locke, and Reid, and Stewart do not differ about the mode of acquiring the idea of duration,—which we with deference deny; but if we should desire to satisfy ourselves as to the accuracy of the author's representations, we must review all the works of the Chinese, of Bacon, and of the rest; unless, indeed, we are so fortunate as to conjecture accurately what are passages for which he is indebted to his predecessors.—An inferior defect we conceive to be the use of such words as are not contained in any dictionary of the English language. We do not object to the introduction of new words, in the formation of his systematic nomenclature,—for they are necessary, and, when legally coined, should have currency; but to introduce terms which are not members of his new community, and which are not found in any classical writer, is always considered as censurable; and it is the more so, in the present case, because our author is by no means incapable of maintaining an uniform purity of style. The words 'dubiety,' 'ecpyrosis,' 'theophanies,' 'adyta,' 'andrapodistic,' 'luminosity,' 'majuscular,' 'embriotic,' 'anthropic,' 'dynamics,' 'quadragintarian,' 'dimensuration,' 'synonymic,' 'entomic,' and 'catachretic,' are not admitted by any English lexicographer, and should not have found a place in any scientific

treatise. In addition to these needless terms, the judge uniformly prefers an obsolete and hard verbiage. Instead of rash, naked, and embroidered, for example, he must say, 'temerarious,' 'nude,' and 'purpled;' instead of deluge, 'cataclysm;' and for general, 'transcendental.' He politely says of M. Wronski, that 'more investigation than can at present be spared, and more materials than are at present possessed, would be requisite, to explain the distinctions between *didactic* and *characteristic anthropology*, *analytic* and *dialectic logic*, *esthetic* and *teleologic* judgment, *architectonic* and *canonic* knowledge, *algorithmy* and geometry;' and 'the import of the terms; *free causality*, *spontaneous causality*, *corporiety*, *negative criterion of knowledge*, *positive criterion of knowledge*, *heuristic*, *ideology*, *semiology*, *methodology*, *theoric functions*, *technic functions*, *pragmatic will*, *pedagogics*, *acroamatic philosophy*.' p. 203. Who can help saying, 'Physician, heal thyself?'

There is one thing in which judge Woodward is systematic:—he praises his patron, Mr. Jefferson, as often and as extravagantly as he can. The gratitude we feel towards those who have done us a great favour (and Mr. W. unquestionably considers it as a great favour to have been appointed a judge of Michigan territory), must occasionally break out into expression, we know;—but surely no man of prudence would be perpetually dwelling upon the subject; and we wonder the author before us did not pour out his whole soul at once, in a good, long, old-fashioned Dedication. The reader would then have considered his eulogical extravagance in the proper light,—as the suspicious praise which an author is bound, by immemorial custom, to lavish on the character of his patron. It would then have done no harm to say of Mr. Jefferson—'that no individual character, in the annals of time, has effected so much for political freedom, and for the cause of republican government;' for, although we possess 'some old-fashioned, square-toed predilection' for certain other characters 'in the annals of time,' we know it is to be expected that Mr. Jefferson's judges should eulogize Mr. Jefferson. Our author's delinquency consists in mingling such dedicatory stuff with his scientific disquisitions,—when it should have been located by itself, either at the beginning—or at the end—or on the outside—or any where, in short, but in the middle of the volume.—Every body knows that Mr. Jefferson has sold his old library, and bought a new one. The books of his former library were placed in different boxes, and, we suppose, very ingeniously labelled:—wherefore Mr. Woodward tumbles upon

him the following heap of words, in praise of what he considers as a '*national* classification of the sciences.'

'The classification of human knowledge, and nomenclature of the sciences, made by Mr. Jefferson, of Virginia, was indeed the earliest after that of the reverend Dr. Johnson, of Connecticut; and yet, from very peculiar circumstances, will, in this review, be examined last. At the time of its formation, it was the act of an individual, the subject of an European monarch, and the community of which he was a member scarcely emerged from its embryotic and colonial stage. Now, it is the system of a nation; a great nation; a nation which has, successfully, fought the autocratic, and the andrapodistic wars; a free nation, in which that very individual, a free man, has honourably fulfilled the most dignified and awful office of free laws.' p. 208.

Nor is Mr. Jefferson the only person who has been stilted on the bombastic sublimity of our author. Almost every individual, learned or unlearned, with whom he has held intercourse is assigned an appropriate niche in 'the temple of science.' Hear, for example, what Dr. Mason, of New York has been doing. 'Before his energetic criticism every vestige of dubiety was dissipated, like the matinal mist by the orient sun.' In two instances the climax is so far above the clouds, that weak mortals, wanting faith in his unseen things, will say he has written nonsense:—And we shall be obliged to any one who will decipher, for instance, the meaning of the sentences which follow.

'Acquired in laborious and painful detail, the discoveries of an individual transcended by a train of successors, the advances of this generation surpassed, by those of subsequent, the language and the science of one nation engrafted upon those of others, the vast and variegated attainments of modern times accumulated upon those of ancient ages; to us, of this age, and of this country, knowledge is presented in rich and copious stores, abundant in materials, defective, principally, in arrangement.' p. 10.

'The earliest epoch from which it is possible to institute a comparison of the attainments of the human mind, connected with the æra which has been assigned, is, as regards the anterior, and even the antediluvian, inhabitants of the world.' p. 29.

This is the way in which our author has contrived to fill up all these three hundred and seventy-one pages. He must needs tell us the precise dates of his visits to Monticello,—and what was thought of the various parts of his system, by the different individuals with whom he had occasion to converse. Nothing, indeed, which can have the most distant reference to his work is permitted to escape unnoticed; and if, fortunately for readers and reviewers, the supreme court of Michigan territory

had not interrupted his labours, we know not but judge Woodward would have been writing quartos till this time. Such books are nothing to him. He composes a volume as he fills up an official document. The sciences were found to be inaccurately classified; and the judge just sits down and pens a *writ of error* in three hundred and seventy-one pages quarto.

‘Do give us next an epigram  
In twenty pages folio.’

We have only one more observation to make on the composition of this volume. Much obscurity is occasioned by the new mode of punctuation, which our author has instituted. The *comma* and *semicolon* abound; but the *colon* has been banished. The semicolon is uniformly introduced in places which require either the comma, or no point at all; for in almost every instance it is used to divide the predicate from the subject. One or two examples will suffice. He says, ‘the intellectual class would comprehend; the human mind, the minds of brutes, the supreme or divine mind, and metaphysics. Metaphysical science is composed of; politics, jurisprudence, ethics, and pneumatology.’ p. 178. ‘The New York philosophical society, judiciously selected, for its first president, Clinton; the pride of the Eboracensian Republic.’ p. 211. Reader, or as the judge would say, (p. 122) ‘my *auditor*,’ be not dissuaded from studying the Introduction to the System of Universal Science, by these *Eboracensian*, *Euclidian*, and *Cullenian* adjectives; for we have now done with his ‘onomatopæism:’ and shall proceed to consider the more substantial contents of the work.

Mr. Woodward and his printer in conjunction have given us one of the most elegant books in the world; and we know not that it contains one typographical error. The matter it contains is interesting; and the author deserves, on many accounts, no ordinary degree of praise. He narrates, with candour, what has been done before his day, in the classification of the sciences; and with the exception of too great partiality for a few of his cotemporaries, we believe his history of the rise and progress of science to be correct. He is concise; and generally, perspicuous. We could not trace his course without republishing the greater part of his performance.

The second thing attempted in this volume is to develop, in a systematic order, his own arrangement of the sciences; and to introduce, from the Greek, a new and classical nomenclature, which may be ingrafted, without variation, into every modern language. In this important work, we hesitate not to affirm, that he has accomplished more than all the literary men who have preceded him. Generally speaking, the new names which he has given, appear well when written, and are

pleasant to the ear when spoken. Had he presented in company with those which already appear, the 'synonymic' tables, to which he refers his readers before they are informed that he intends to publish any, his nomenclature would, perhaps, have speedily become popular. At present, none but those who are acquainted with the Greek language can be expected to understand it. But to come more immediately to his system and nomenclature. He uses the word *epistemia*, to denote a *specific department of human knowledge*, commonly called 'a particular science.' By 'encatholepistemia' he means 'a system of universal science.' The name of every *epistemia* is to terminate in *ia*; but a department of science which may be called generic, because it contains several species of *epistemia*, is to bear some 'vocable' (or word, 'my auditor,') which shall end in *ica*. The subdivision of an *epistemia* is to receive some name ending in *logia*; and the division of a subdivision, a word ending in *graphia*. Universal science he divides into three Provinces, six Classes, and eighteen Orders. These eighteen Orders then produce sixty-four Epistemia. 'All human science (says he) must have relation either to matter, or to matter in union with mind, or to mind.' p. 248. *Hylica* is his name for matter; *hystennoeica* for matter and mind in union, and *enneoeica* for mind. These are his three Provinces of science. But here an objection arises,—that the names of his provinces are the names of the objects of science, and not of the sciences themselves. Matter is not a science; but the knowledge which the mind has of matter is science. The same is true of mind, and of matter and mind in union. A system of universal science should branch out,—not into created beings,—but into provinces, classes, orders, and species. Every part of the chart which follows the name of *encatholepistemia* should be a ramification of universal science. Our author himself was apparently so sensible of this truth, that in his second table he expunges *hylica* and *hystennoeica* to make room for *hetarica* and *aesthetica*, which are names of artificial distinctions between auxiliary, and principal, sciences.

Having ascertained the Provinces of science, he proceeds to educe his generic and specific sciences, in such a manner as he thinks a being would 'instantaneously coming into existence, with all the human faculties in their full perfection, but yet unacquainted with the objects of the material universe. Present material objects to such a being, he says, and the mind will perform 'certain abstractions.' 'The first abstraction is that of *number*. The idea of number (continues he) never could have entered into a human mind, but by the actual presentation of material objects to its observation.' This 'idea

of number,' he tells us, may 'be considered the base of all human science. It is that indispensable foundation, which being removed, the whole superstructure falls.'

Here the truth forces from us the remark, that Mr. Woodward appears to be less acquainted with the philosophy of the human mind, than with any other science. The wisest men of the present age have abundantly proved, that there are no abstract ideas in the human mind. The Creator has given us the faculty of *conception*, as well as that of *perception*; so that he who can *perceive* one body, may *conceive* of another like it, and of the meaning of the words *two*, *ten*, or *twenty*. It is not true that 'the idea of number never could have entered into a human mind but by the actual presentation of material objects to its observation;' for it is as easy to conceive of two things that think, as of two things that do not think. Were a human being instantaneously created, as he supposes, with all the mental faculties complete, he might, without ever having perceived matter, be conscious of an act of judgment now—*remember* a similar act of judgment already past,—and then *conceive* of the meaning of *two judgments*.

We like the classification of the judge, better than his method of accounting for the operations of the human mind in 'systematization.' The generic science which springs from our knowledge of number he calls *mathematica*; which he confesses to be an objectionable term, because it signifies something *learned*, and is equally applicable to every science which is acquired by attendance on instruction. The class of *mathematica*, or the science of mathematics, is divided into two orders,—*arithmetica*, the science of number,—and *geometrica*, the science of number applied to space. For our conception of space he attempts to account, as he did for that of number, by the doctrine of abstract ideas. *Arithmetica* generates two *epistemia*,—called *arithmia* and *analysis*; the first of which includes common arithmetic and logarithms, and the last algebra and fluxions. *Geometrica* contains the three *epistemia* of *geometria*, *goniometria*, and *ancylometria*; answering to geometry, trigonometry, and spherical trigonometry; or the mensuration of space in general, of angles, and of curves.

Again, the province of matter originates the class called *physica*, or physical science; which affords the four orders of *physiognostica*, *physiosophica*, *uranica*, and *chymica*; answering respectively to natural history, or that which is perceived of physics,—to natural philosophy, or the knowledge of physical properties and operations,—to the science of the heavenly bodies,—and to chymistry. *Physiognostica* produces the specific sciences of *geognosia*, or geology; of *oryctognosia*, or mine-

ralogy; of *phytognosia*, or botany; and of *zoognosia*, zoology. *Physiosophica* is an order containing six epistemia; to wit, *stereosophia*, *hydrosophia*, *aerosophia*, *photosophia*, *electrosophia*, and *magnetosophia*; which answer respectively to the science of solids—of water—of air—of light—of electricity—and of magnetism. Galvinism he deems a subdivision only of electricity. The orders *uranica* and *chymica*,—have each one epistemia,—called *astronomia* and *chymia*,—answering to astronomy and chymistry. To these two last orders the objection arises, that they are made *generic sciences*, and yet contain each only one specific science; which is nothing less than to bestow two names upon the same thing. There may be individual things which do not admit the application of these relative terms; but where different species, or specific differences are found there must be a genus; and a genus should include specific differences; otherwise, as in the case before us, a distinction is made where there is no reason for it. Besides, the science of astronomy naturally belongs to the order of *geometrica*, and should follow *ancylometria*, because it consists principally in the application of spherical trigonometry to the heavenly bodies. *Chymia* also naturally takes rank with the *epistemia* belonging to the order of *physiosophica*; which treats of the properties and operations of matter acting upon matter.

Our author's second Province, *hystennoeica*, is divided into three classes,—*anthropoglossica*, *anthropodynamica*, and *diagetica*; which respectively correspond with the sciences relating to human speech, to human power, and to narration. *Anthropoglossica* is divided into the three orders of *grammatica*, *dialectica*, and *callilologica*; which signify the sciences that are founded upon letters, upon dialectics, and upon belles-lettres. The *epistemia*, deduced from the order *grammatica*, are *grammatia*, and *anthropoglossia*,—or grammar, and human language: from the order *dialectica*, *logiotetia*, and *rhetoria*,—or logic and rhetoric; and from *callilologica*, *callilogia*, *poesia*, *euphradia*, and *diacrisia*; which in English are fine writing, poetry, fine speaking, and criticism. *Euphradia* ought not to be made a specific science, because it is a branch of rhetoric. The principles of rhetoric are merely general observations, or rules, obtained by analysis, to regulate fine speaking. It is immaterial whether the speech be written or not. It is worthy of remark, that *lexicography*, which is of superior importance to many of these *epistemia*, has no place in the table. The author confesses, it is another defect in the system, that *callilogia* has the termination of *logia*; which has been allotted to the first department of science inferior to an *epistemia*. He might have assumed the word *λεξις* *sermo*, *stilus*, instead of *λογος*, *sermo*; and then by using the

word *callilexia*, the science of *fine writing*, he would have maintained inviolate his distinctive termination of a specific science. The second class of his second province, or his *anthropodynamica*, has four orders; which, denoting the healing art, æconomics, ethics, and military science, have received the names of *iatrica*, *oeconomica*, *ethica*, and *polemitactica*. Here the order *ethica* is, we think, out of its proper place,—inasmuch as the moral duties, which man should perform in relation to himself, to his fellow men, and to his maker, do not, as the author intimates, originate in the power which one human mind has over another. It is partly from the nature of the human mind, which is made capable of the acts of conscience from its internal operations on itself,—but especially from the relation subsisting between a created and the uncreated mind, that the principles of moral philosophy, and the knowledge of them, or the science of ethics, take their rise.

Our author's *iatrica* includes eight *epistemia*,—called *anatomia*, *zoonomia*, *therapeutria*, *anthropiatria*, *chirurgia*, *mæeutria*, *zootomia*, and *zoiatria*; which are the sciences that treat of *anatomy*, the *laws of life*, *remedies*, or *materia medica*, the *healing of man*, *surgery*, *midwifery*, *comparative anatomy*, and the *healing of brutes*.—His *oeconomica* embraces agriculture, mechanism or handiworks, the fine arts, commerce, and political economy; which are respectively denominated *georgia*, *chirotechnia*, *callitechnia*, *emporia*, and *politoeia*. His *ethica* are the sciences of morality, jurisprudence, politics, and the laws of nations; which are all expressed by the four words,—*ethosopha*, *themistia*, *politarchia*, and *ethnonomia*. The order *polemitactica* generates eight *epistemia*; relating respectively to infantry, cavalry, artillery, fortification, the staff department, the marshaling of armies, 'generalship,' and naval tactics; which are denominated *pezotaxia*, *hippotaxia*, *barytotaxia*, *sthenotaxia*, *erismatotaxia*, *stratotaxia*, *polemitaxia*, *nautotaxia*.

The third generic science of the second province is that of *narration*; which is called *diegetica*, and is needlessly divided into *geocosmica*, the description of 'the human world,' and *historica*, history. The first of these produces *chroniotetia*, or chronology,—and *geocosmia*, or the description of the world of men. *Historica* gives us voyages, travels, and journals in the *epistemia* named *hodoeporia*; and *biotetia*, *historia*, *archæotetia*; which mean biography, history, and antiquities.

We have now arrived at the last and most important province, which is that of *ennoeica*, or mind; and here our author seems to have been weary,—here august Homer slumbers. His class is but the repetition of his province; it is, the solitary *ennoeica* again, affording a distinction without any difference.

The class is ramified into three orders,—*psychica*, or the science of souls,—*pneumatica*, or pneumatology,—and *eusebica*, or godliness. *Psychica* is manifested either in brutes or in men; and hence are derived the epistemia of *zoonoeia*, or the science of the souls of brutes,\* and *anthroponoeia*, the science of human souls. We should have been better pleased, had he said *zoopsychia*, and *anthropopsychia*; since he has made a distinction which is just, between an animal soul, the seat of instincts, and the *spirit*, or mind; for in man, &c. there is, according to scripture, a combination of 'body, soul, and spirit.' *Psychia* denotes the animal soul, and *pneumatia*, the reasoning mind, whether it be found in man, or superior beings.

Our author educes from the order *pneumatica*, the epistemia of *pneumatia*, or spirits, and *theotetia*, or the godhead. *Eusebica* he expands into *ethnolatry*, *hebræosebia*, *evangelia*, and *elutheria*; which denote the worship of the nations, the religion of the Jews, the gospel, and free-thinking. Under the last name he would describe all those opinions called philosophical, that respect religion.

Had the first table satisfied Mr. Woodward, he would not have introduced the second. He was sensible, that, according to the order in which the mind acquires human science, grammar is before mathematics and physics. To produce, therefore, a more desirable arrangement of his epistemia, he resorts to an artificial distinction already described, by which he is enabled to take his third class, *anthropoglossica*, from its original place, and introduce it at the head of his table; so as to bring out the sciences founded on language before those which originate, as he thinks, in abstractions of the mind. This is an improvement in the result; but the end will not render the means philosophical; nor is his second table 'a naturally concatenated system' of universal science. While making this transposition, we wonder that the author did not think of another, and contrive to give *chroniotetia*, or chronology, and all the sciences originating in human language, which he has elicited from the fifth class, *diegetica*, a location contiguous to their natural relatives; for *rhatoria*, *diacrisia*, and *chroniotetia*, *biotetia*, and *historia* and their companions, are of one sisterhood, and have all descended from their venerable grandmother, *Anthropoglossica*. In separating chronology from criticism by forty-two intervening epistemia, he has violated one of his excellent fundamental rules,—'that subjects closely allied by nature should not by art be widely separated.' p. 243.

\* We use the word *soul* in this place, because there is no other in the language which so nearly expresses our meaning.

We have now taken a brief,—but, we believe, an intelligible view of Mr. Woodward's performance;—a task in which we have had no inconsiderable difficulty, arising from the frequent involution and obscurity of the author's language. We have candidly exposed what we consider as the principal defects of the classification; which, we think, is susceptible of much improvement. Before judge Woodward wrote, we agree with him, that the American Dr. Samuel Johnson, of Connecticut, had given the best 'general scheme for the partitions of the sciences, according to the natural order of things; or a synopsis of all the parts of learning.' Now the system before us stands, we apprehend, without a rival; and though it cannot claim the praise of perfection, we think it is justly entitled to that of being more complete than any other extant.

But we have not done with it yet. We have already suggested some alterations which we think would greatly improve it; and we shall now proceed to state, at somewhat greater length, the reasons on which our opinion is founded.—Without one exception, then, the name of a generic science shall end in *ica*, that of a specific science in *ia*, and that of the first ramifications of a specific science in *logia*. The name of any generic science is *epistemica*, and that of any specific science *epistemia*. The system of universal science will be an *epistemica*, and therefore it shall be *catholepistemica*. By calling it *catholepistemia*, Mr. Woodward has violated his own rule concerning the termination of words in *ica*.

Now the first knowledge acquired by any being born into our world which can be the foundation of any *epistemica*, or *epistemia*, is the perception of human speech. The distinction which Mr. Woodward has marked, between *γνῶσις*, *perception*, or the simplest form of knowledge, and *σοφία*, which implies *conception*, and many other operations of the mind,—especially that complex one of *reflection*,—shall be observed. A child who is not deaf from his birth, hears the sound of human speech before he opens his eyes, and long before he looks at objects with any attention. The *epistemica* which treats of human speech, we call *glossignostica*, or the department of the sciences relating to human speech.—Next, a child has a perception of some material object which is presented to his bodily organs. He sees, hears, smells, tastes, and touches matter in various forms. The history of his *perceptions*, would be what is commonly called natural history. These perceptions are the foundation of several sciences; and the knowledge, therefore, which we have by the perception of physical objects we call *hylegnostica*. These exhaust all the sciences which emanate from simple perception.—Having perceived material things, we con-

ceive of number, space, and other things. The generic department of science which includes all the specific departments that originate in *conception*, relative to matter, we call *hylesophica*. In like manner, we have no *perception* of power; but we *conceive* of the meaning of the word, and reason about the thing. That *epistemica* which includes all sciences that have their base in power, we denominate *dynamisophica*.

Of mind we have no knowledge by simple perception; but we *conceive* of something which thinks, feels, chooses, and acts from volition. We are conscious, too, of mental operations. The *epistemica*, which includes all the sciences that have their base in the knowledge of mind, we style *ennoesophica*. Thus we have five *provinces*, which include all human knowledge; the two first of which are founded in perception, and the three last in some operations of mind consequent upon perception. Had we not learned of Reid a better philosophy than that of Locke, we should say, that all knowledge is derived either from sensation or reflection: and so, indeed, it is, if by sensation Mr. Locke meant perception, and by *reflexion* all the other acts of the human mind. Mr. W. evidently uses *sensation* for *perception*.

The province *glossignostica*, has three classes; *grammatica*, *diegetica*, and *dialectica*,—which include all the sciences that have their base in the knowledge of the component parts of language; in narration, and in the selection and arrangement of words. The class *grammatica* includes the specific sciences, or the *epistemia*, which are denominated *grammatia*, *anthropoglossia*, and *lexiconia*. The names of these sciences having been already explained, we shall not repeat them; but merely state, that the last means *lexicography*. Our class *diegetica* includes the same *epistemia* which Mr. W. has deduced from it. Our class *dialectica* includes *callilexia*, *poesia*, *logiotetia*, *rhatoria*, and *diacrisia*; which exhaust all the *epistemia* which are originated by the perception of human language. The second province, *hylegnostica*, relates to material things, which either are or are not endowed with life; and therefore contains the classes *azoeica* and *zoeica*. The first has two *epistemia*, called *geognosia* and *oryctognosia*, and the last two, *phytognosia* and *zoognosia*.—The third province, *hylesophica*, corresponds to Mr. Woodward's *mathematica*; with this exception, that *astro-metria*, or astronomy, is included in the number of its *epistemia*; because every thing attributed to the heavenly bodies, which does not relate to their appearance, their size, their circular orbits, and their places in them, must belong either to the hand of their Creator, in governing them, according to his centripetal and centrifugal laws; or else to the occult science

of impostors, stigmatized as *magic*, or *astrology*. The fourth province, *dynamisophica*, has four classes,—denominated *physiosophica*, *iatrica*, *technematica*, and *polemitactica*; *epistemica* that include all our knowledge of the power of inanimate matter acting on matter,—of the power of matter acting on animal bodies,—of power exerted in mechanical or fine arts,—and of physical force applied in warfare. We prefer *technematica*, from the genitive case of *τεχνημα*, *opus arte confectum*, an artificial work, to *oeconomica*, a domestic concern,—because we cannot ascertain what the fine arts, sculpture, music, painting, and dancing have to do with *economy*; nor do we perceive that commerce appertains to a family any more than to an individual. *Georgia*, which we term *geosophia*, or agriculture, should be located, we apprehend, with those sciences which treat of inanimate matter acting on matter; because it principally consists in our knowledge of the operation of soil and climate upon other material things. Mr. Woodward's *politoeconomia*, or political economy, we would make a subdivision of *politarchia*; ending in *logia*, because civil government, among other things, ought to attend to finance, and all such applications of power as may promote the public welfare. According to our scheme, therefore, *physiosophica* includes the *epistemia*, *stereosophia*, *hydrosophia*, *aerosophia*, *photosophia*, *electrosophia*, *magnetosophia*, *chymisophia*, and *geosophia*. The sciences deduced from *iatrica* are the same in our system and that of Mr. Woodward; but our *technematica* includes only *chirotechnia*, *callitechnia*, and *emporica*. We retain our author's division of the specific military sciences.

Our fifth and last province, *ennoesophica*, which includes all the sciences emanating from our knowledge of mind, we divide into three classes,—*psychica*, *pisteuica*, and *ethica*; which denote, respectively, the doctrine of mind, of religious belief, and of moral duties. All who have any knowledge of mind, believe something about the relation of minds, and the duties consequent upon their knowledge and situation. The class *psychica* is ramified into the *epistemia*, *zoopsychia*, *anthropsychia*, and *pneumatia*; which treat of the souls of animals and men, and of the world of spirits. The class *pisteuica*, includes *atheotetia*, *pantheotetia*, *hentheotetia*, *trihentheotetia*, and *theanthropia*,—or the doctrines which men receive concerning atheism, pantheism, unitarianism, trinitarianism, and God and man united in one person, Christ Jesus. The class entitled *ethica* contains those departments of knowledge which respect the law of nations, civil government, jurisprudence, ecclesiastical government, the duties which man owes to himself and to his brother man, the religious rites of the nations, and enlightened

piety, or godliness: which are respectively called *ethnonomia*, *politarchia*, *themistia*, *ecclesiarchia*, *ethosophia*, *ethnilatria*, and *eusebia*. Ecclesiastical government we think as well entitled to a distinct place among the epistemia as civil government; and it may be subdivided into as many different orders, ending in *logia*; for thus we would denominate the first ramifications of a specific science.

The philosophical opinions which judge Woodward wishes to constitute the gregarious science of *eleuthesia*, will find their places, according to their character, under some of the epistemia which we have named. Those who think that man's soul is essentially like that of a brute, or that organized matter thinks, will inculcate their sentiments under the head of *zoopsychia*; those who think man has only one spiritual and, at the same time, animal soul, superior to the soul which is common to all mere animals, will express their opinions under the head of *anthropsychia*; while those who think that there are angels good and bad,—that the mind of man may subsist without the seat of animal life,—that some human spirits are disembodied, or on the other hand, that devils are passions and diseases,—will publish their dissertations under the head of *pneumatia*. The philosophical reasonings, if they may enjoy so honourable a name, which are intended to prove, that there is no God, or that the universe is God, belong to the two first departments educed from *pisteuica*, or the generic science of things believed. The deist, the mohammedan, the modern Jews, and several denominations of christians, who say there is one God, but no trinity, will proclaim their religious opinions under the title of *hentheotetia*. Those who believe that God is indeed one essence, but subsisting in a tripersonal manner, and the opinions which are ascribed, by many, to the ancient Jews, will find a place for their science in the department of *trihentheotetia*. Those who believe that Jesus Christ is God and man, in one person, will have exclusive possession of the department styled *theanthropia*; while every order of polytheism and idolatry will belong to *ethnilatria*, and every duty of piety of which any have knowledge will be inculcated under the title of *eusebia*,—that is, piety, or our duty towards God.

In the new arrangement which has now been proposed, we have avoided the impropriety of introducing ethics before that knowledge which is essential to moral obligation, and to the discharge of moral duties. Our morals, so far as they can be reduced to any system, grow out of our opinions; and in every scheme of religion, some things are proposed, that they may be believed, before any good works are expected. It will be universally admitted, that good morals and true religion, what-

ever they may be, are the most important and sublime subjects which employ the mind of man. We begin with the rudiments of science,—with articulate sounds and letters,—and end in piety towards God. We bring out such a classification of the departments of knowledge as we believe includes the whole of science, and in such a subordination of the greater to the less as is required by common sense. We thank Mr. Woodward that we have been excited to attempt this; and we sincerely hope that the patronage of the literary world will be such as to enable him, in a future edition, to prune away the superfluous parts of his book, and to make improvements in the composition of the rest. We have freely suggested the alterations of which we think his plan is susceptible; and we shall be gratified if they meliorate in any measure his own ingenious classification. We recommend to him, a thorough examination of the works of Reid and Stewart; as a second, or, perhaps, a third perusal may wean him from some metaphysical inaccuracies,—especially of diction,—which he must have imbibed, when he knew all the excellences of Locke, without perceiving any of his defects.

That the public may become well acquainted with Mr. Woodward's system, and that they may compare our improved classification with the original, we shall introduce, *first*, a copy of the table already published; *secondly*, the one which we propose; and *thirdly*, a translation, as nearly as it can be given on a single page, of the newly invented names which we have adopted. The English name, or phrase, will occupy the same place with that word of the new nomenclature which it is intended to explain.—The reader will observe, that we have enumerated sixty-five, instead of judge Woodward's sixty-four specific sciences; that we have arrived at them by two instead of three steps; and that we obtain our object by one table more perfectly than he has done by two. Besides, we follow the order in which man actually acquires his knowledge, instead of supposing some method in which a superior being might, from existing things, derive it for him.

No. I. *Mr. Woodward's Table of the Nomenclature of Science.*

Universal Science.	Provinces.	Classes.	Orders.	Epistemia.	
Catholepistemia.	I. Hylica.	I. Mathematica.	I. Arithmetica.	Arithmia.	
				II. Geometrica.	Analysis.
		II. Physica.	I. Physiognostica.	Geometria.	Geometria.
				Goniometria.	Goniometria.
				Ancylometria.	Ancylometria.
			II. Physiosophica.	Geognosia.	Geognosia.
				Oryctognosia.	Oryctognosia.
				Phytognosia.	Phytognosia.
				Zoognosia.	Zoognosia.
				Stereosophia.	Stereosophia.
				Hydrosophia.	Hydrosophia.
	II. Hylenceica.	I. Anthropoglossica.	III. Uranica.	Aerosophia.	
			IV. Chymica.	Photosophia.	
			I. Grammatica.	Electrosophia.	
				Magnetosophia.	
			II. Dialectica.	Astronomia.	
			III. Callilogica.	Chymia.	
				Grammatia.	Grammatia.
				Anthropoglossia.	Anthropoglossia.
		II. Anthropodynamica.	I. Iatrica.	Logiotetia.	Logiotetia.
				Rhetoria.	Rhetoria.
				Callilogia.	Callilogia.
				Poesia.	Poesia.
				Euphradia.	Euphradia.
			II. Economica.	Diacrisia.	Diacrisia.
				Anatomia.	Anatomia.
				Zoonomia.	Zoonomia.
				Therapeutria.	Therapeutria.
				Anthropiatria.	Anthropiatria.
	III. Ennceica.		III. Ethica.	Chirurgia.	Chirurgia.
		Mæeutria.		Mæeutria.	
		Zootomia.		Zootomia.	
		Zoiatria.		Zoiatria.	
		IV. Polemitactica.	Georgia.	Georgia.	
			Chirotechnia.	Chirotechnia.	
			Callitechnia.	Callitechnia.	
			Emporia.	Emporia.	
			Politœcia.	Politœcia.	
			Ethosophia.	Ethosophia.	
			Themistia.	Themistia.	
	III. Diegetica.	I. Geocosmica.	Politarchia.	Politarchia.	
			Ethnonomia.	Ethnonomia.	
		II. Historica.	Pezotaxia.	Pezotaxia.	
			Hippotaxia.	Hippotaxia.	
		I. Psychica.	Barytotaxia.	Barytotaxia.	
			Sthenotaxia.	Sthenotaxia.	
		II. Pneumatica.	Erismatotaxia.	Erismatotaxia.	
			Stratotaxia.	Stratotaxia.	
		III. Eusebica.	Polemitaxia.	Polemitaxia.	
			Nautotaxia.	Nautotaxia.	
		III. Ennceica.	I. Geocosmica.	Chroniotetia.	Chroniotetia.
	Geocosmia.			Geocosmia.	
	II. Historica.		Hodœporia.	Hodœporia.	
			Biotetia.	Biotetia.	
	I. Psychica.		Historia.	Historia.	
			Archæotetia.	Archæotetia.	
	II. Pneumatica.		Zoonœcia.	Zoonœcia.	
			Anthroponœcia.	Anthroponœcia.	
	III. Eusebica.		Pucumatia.	Pucumatia.	
			Theotetia.	Theotetia.	
	III. Ennceica.		I. Geocosmica.	Ethnilatria.	Ethnilatria.
		Hebreosebia.		Hebreosebia.	
		II. Historica.	Evangelia.	Evangelia.	
			Eleutheria.	Eleutheria.	
I. Psychica.					
		II. Pneumatica.			
III. Eusebica.					

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No. II. *Mr. Woodward's Table Improved.*

<i>Universal Science.</i>	<i>Provinces.</i>	<i>Classes.</i>	<i>The Epistemia.</i>	
<i>Catholepistemia.</i>	I. <i>Glossignostica.</i>	I. <i>Grammatica</i>	<i>Grammatia.</i> <i>Anthropoglossia.</i> <i>Lexiconia.</i> <i>Chroniotetia.</i> <i>Geocosmia.</i> <i>Hodeporia.</i> <i>Biotetia.</i> <i>Historia.</i> <i>Archæotetia.</i>	
		II. <i>Diegetica.</i>	<i>Callitexia.</i> <i>Logiotetia.</i> <i>Rhetoria.</i> <i>Diaerisia.</i>	
		III. <i>Dialectica.</i>	<i>Geognosia.</i> <i>Oryctognosia.</i> <i>Phytognosia.</i> <i>Zoognosia.</i> <i>Arithmia.</i> <i>Analysia.</i> <i>Geometria.</i> <i>Goniometria.</i> <i>Ancylometria.</i> <i>Astrometria.</i> <i>Stereosophia.</i> <i>Hydrosophia.</i> <i>Aerosophia.</i> <i>Photosophia.</i> <i>Electrosophia.</i> <i>Magnetosophia.</i> <i>Chymisophia.</i> <i>Geosophia.</i> <i>Anatomia.</i> <i>Zoonomia.</i> <i>Therapeutria.</i> <i>Anthropiatria.</i> <i>Chirurgia.</i> <i>Mæeutria.</i> <i>Zootomia.</i> <i>Zoiatria.</i> <i>Chirotechnia.</i> <i>Callitechnia.</i> <i>Emporia.</i> <i>Pezotaxia.</i> <i>Hippotaxia.</i> <i>Barytotaxia.</i> <i>Sthenotaxia.</i> <i>Erismatotaxia.</i> <i>Stratotaxia.</i> <i>Polemitaxia.</i> <i>Nautotaxia.</i> <i>Zoopsychia.</i> <i>Anthropsychia.</i> <i>Pneumatia.</i> <i>Atheotetia.</i> <i>Pantheotetia.</i> <i>Hentheotetia.</i> <i>Trihentheotetia.</i> <i>Theanthropia.</i> <i>Ethnonomia.</i> <i>Politarchia.</i> <i>Themistia.</i> <i>Ecclesiarchia.</i> <i>Ethosophia.</i> <i>Ethnilatria.</i> <i>Eusebia.</i>	
		II. <i>Hylegnostica.</i>	I. <i>Azoeica.</i>	
			II. <i>Zoeica.</i>	
		III. <i>Hylesophica.</i>	I. <i>Arithmetica.</i>	
			II. <i>Geometrica.</i>	
		IV. <i>Dynamisophica.</i>	I. <i>Physiosophica.</i>	
				II. <i>Iatria.</i>
	III. <i>Technematica.</i>			
	IV. <i>Polemitactica.</i>			
	I. <i>Psychica.</i>			
			II. <i>Pisteuica.</i>	
				III. <i>Ethica.</i>
	V. <i>Ennæosophica.</i>			

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# No. III. A Key to the Improved Table.

Provinces.	Classes.	Specific Departments of Science.
The whole of Human Science in a System.	I. Department of Sciences that originate in the perception of Human Speech.	The Science of Grammar. Human Speech. Lexicography. Chronology. the Natural History of Mankind. Voyages, Travels, &c. Biography. History. Antiquities. Belles Lettres. Logic. Rhetoric. Criticism. the Natural History of the Earth. Mineralogy. Botany. Zoology. Arithmetic. Algebra. Geometry. the Mensuration of Angles. the Mensuration of Curves. Astronomy. Solid Bodies. Water. Light. Electricity. Magnetism. Chymistry. Agriculture. Anatomy. the Laws of Life. Remedies. the Healing of Man. Surgery. the Obstetrick Art. Comparative Anatomy. the Healing of Brutes. Handiworks. the Fine Arts. Commerce. Infantry. Cavalry. Artillery. Fortification. The Staff Department. Marshalling Armies. Generalship. Naval Warfare. Animal Souls. Human Souls. Pneumatology. Atheism. Pantheism. Unitarianism. Trinitarianism. the Divinity and Humanity of Christ. the Law of Nations. Civil Government. Jurisprudence. Ecclesiastical Government. Morals. Gentile Worship. Piety.
	II. Department of Sciences originating in perceptions of Matter.	
	III. Department of Sciences derived from our conceptions concerning Quantity.	
	IV. Department of Sciences derived from our conceptions of Power.	
	V. Department of Sciences dependent on our conceptions of Mind.	
	I. Department of Sciences pertaining to Letters.	
	II. Department of Sciences pertaining to Narration.	
	III. Department of Sciences that pertain to the selection and arrangement of words.	
	I. Department of the Science of Inanimate Matter.	
	II. Department of the Science of Animated Matter.	
	I. Department of the Sciences of Number.	
	II. Department of the Sciences of Measure.	
	I. Department of Sciences pertaining to Physical Powers.	
	II. Department of Sciences pertaining to Medical Power.	
	III. Department of Sciences pertaining to Works of Art.	
	IV. Department of Sciences pertaining to War.	
	I. Department of Sciences pertaining to Mind.	
	II. Department of Sciences pertaining to Religious Belief.	
	III. Department of Ethical Sciences.	
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We must not, after all, be taken for enthusiasts in the enterprise of the author before us. Our readers should distinctly understand, that the object of the present volume, (and we are not confident of receiving another,) is,—not to do for all the sciences what Linnæus did for one,—but to do for the sciences themselves what Linnæus did for the subjects of a particular science; or, in still more definite language, to do for the several departments of universal science what that philosopher did for the subjects of botanical science. Linnæus classified material objects; whereas the author under review has undertaken to classify the several systems of facts and principles and reasonings to which the examination of both material and immaterial objects has given rise. The subjects of their respective labours, therefore, are not a little different: and in order to determine the comparative merits of the two achievements, it is necessary to ascertain the peculiar circumstances which render any multitude of objects susceptible of arrangement into provinces, orders, or any other general divisions. It is requisite, in the first place, we apprehend, that there should be, in the whole body of particulars, some common quality which can make them susceptible of formation into one general subject, *simplex et unum*: and, in the second place, that the specific particulars which come into any one subordinate department, should have, besides the quality that is universal, some common property or circumstance which palpably distinguishes them from those that fall to any other subordinate department.

In the first of these requisites the undertakings of Linnæus and of our author appear to be equally philosophical; inasmuch as the investigation of the particular objects in the vegetable world is the general subject of botanical science; while the consideration of the particular departments of learning composes the general subject of universal science. Vegetation, in the former case, and learning or knowledge, in the latter, are those common properties respectively, which render the two classes of objects susceptible of arrangement into general heads. In the second requisite, however, we think botany has somewhat the advantage over catholepistémica. If, in any collection of material objects, there runs through a certain number some common attribute or quality, the circumstance of its being addressed directly to the senses renders it so distinct and obvious that we are never liable to mistake it for any other quality whatsoever. In the vegetable kingdom, for example, when we find that one race of plants have but a single stamen, another but two, a third but three, and so on, the foundations of different classes are as distinct as numbers can make them. All

subjects purely intellectual, however, are too indefinite, or else too imperfectly understood, to admit of a precise classification. They have, it is true, certain general divisions which, in some parts, are sufficiently distinct: but, like the colours of the rainbow, they run into each other; while, unlike those colours, they are unsusceptible of prismatic separation. It is in consequence of the indistinctness of our perceptions, and other mental operations in relation to these things, that the philosophy of the human mind has not kept pace with the philosophy of matter;—and to the same cause we attribute the deplorable fact, that subjects, which are solely or partially intellectual, have never received so precise and definite a nomenclature, as those which are purely and absolutely material. Two out of the three provinces, according to Mr. Woodward's classification,—the *Hylennæcia* and the *Ennæcia*, or the sciences founded upon matter in union with mind, and the sciences founded upon mind by itself,—must necessarily partake of the general indistinctness which attends all intellectual phenomena. Though we must confess, therefore, that the science of botany is superior to the system of universal science, in the definiteness and precision of the circumstances upon which its nomenclature is founded, we must not be considered as granting, on the other hand, that the *catholepistémica* may not have subordinate divisions sufficiently distinct for all the purposes to which such a classification can be applied. The department of universal science founded on our perceptions of matter, for example, may be divided into the two classes which are conversant with our perceptions, first, of inanimate, and, secondly, of animate matter; while these two classes, again, can each be subdivided into two sciences; the former of which are, the science of the earth, and the science of minerals; the latter, the science of plants and the science of animals. This classification is sufficiently definite; and yet we can hardly tell whether botany should be arranged under the class which embraces the science of *inanimate*, or under that which includes the science of *animate matter*. The point can be settled only by defining *life*, and ascertaining whether it be proper to predicate it of plants, and not of minerals.

There is another point of analogy between the enterprises of Linnæus and of our author which we ought to consider very briefly before we dismiss the subject. In entering upon a work like that of Mr. Woodward, the object and utility of a nomenclature should be held constantly and steadily in view. Besides the advantage of having a set of words formed out of a language equally intelligible to the learned of all nations and tongues; an advantage which is both obvious and important; the only

great practical benefit that seems to be at all derivable from giving new names to old objects, consists in the relief afforded to the mind by enabling it to grasp a multitude of particulars in a few general terms. When we have once accurately classified the subjects of any particular science, instead of overtasking the memory with the recollection of all the attributes belonging to every individual, we have only to remember those few common qualities which run through each particular class: and as the terms of all new nomenclatures are generally composed of words which stand for these common qualities, the memory is again assisted by the establishment of an associating principle between the several objects and their respective names. Were it not for some general exponents of this sort, we should get lost in the multitude of particulars with which almost every science is conversant. The memory, for example, would find itself absolutely inadequate to the retention of all the objects embraced by the term botany, were they not referable to a few general heads, by means of the common attributes which distinguish the several classes and orders: and even as it is at present,—with all the advantages of perhaps the best classification that could be devised,—no person can become so great a proficient in the science as to dispense altogether with the employment of a reference book.

The great merit of the Linnæan classification is found in the precision and distinctness, and consequent ease, with which it enables us to comprehend an almost innumerable collection of objects in a comparatively small number of departments: and it must, indeed, be the chief object of all such undertakings to render the student capable of mastering a science which, on account of the multitude of particulars included in it, would otherwise be almost unattainable. If, for instance, there were but fifty plants in the world, a classification and nomenclature would be nearly superfluous; inasmuch as the human mind, limited as it is, can, without any very great straining, have a clear perception, and a distinct remembrance, of each individual object, where the whole number is so small. Yet it is not to be denied, that the classification of even fifty particulars into two or three general provinces would greatly relieve the mind in their perception and remembrance. The glory of a work, on the other hand, must be measured by the difficulty of achievement: and as there must be a great deal more difficulty in the classification of five thousand, than in that of fifty, objects, we cannot persuade ourselves that the author before us is entitled to any thing like so much praise as the father of botanical science. The former had, at the farthest, only about sixty-five particulars to classify; whereas the latter had to ar-

range into classes and orders more than sixty times that number. But to compensate, in some measure, for the advantage of superior difficulty, it must be considered, that while the common qualities which Linnæus made the foundations of his arrangement were obvious, definite, and sensible, those which our author had to search out were, in a great many instances, abstruse, indistinct, and equivocal. We are sure his classification has been the result of much labour: and though the undertaking was not urgently called for, and has been a great deal too hastily, and too clumsily prosecuted, we think the general adoption of his table, with some alterations, would well enough consummate and top off a system of universal science.

But, besides composing a set of terms for the several departments into which he has classified the sciences, the author before us has given entirely new names to the very sciences themselves. And we are pretty sure, that the substitution of this part of his system for the set of old names which the sciences now bear, would be another considerable improvement in our present nomenclature. What, for example, would be more desirable than to use the single terms 'stereosophia,' 'hydrosophia,' 'aerosophia,' 'photosophia,' 'electrosophia,' and 'magnetosophia,' for the old circumlocutions of the doctrine of solids, the doctrine of fluids, the doctrine of light, the doctrine of electricity, and the doctrine of magnetism? If, in short, we could erase from our books the whole body of terms and phrases which at present designate the different branches of science, and insert in their places a complete set of new names, constructed on some general plan, like that proposed in the volume before us, there can be no doubt that the innovation would be an improvement. We confess, however, that we are not oversanguine as to the accomplishment of such a revolution. When men are obliged, at all adventures, to remember the specific term which designates each individual of any number of objects, perhaps no considerations of improvement could wean their tongues from the habit of articulating familiar names, and habituate it to the pronunciation of a new nomenclature. If the multitude of particulars is so great, that the mind finds itself incapable of retaining the specific names, we are driven by sheer necessity to adopt a system of comprehensive terms. This was, of course, one great cause of the comparative facility with which the new chymical nomenclature obtained in almost all modern languages; and the same circumstance would equally facilitate the adoption of a new arrangement and a new set of terms for many of the remaining sciences. As the number of the sciences themselves, however, is comparatively insignificant, the ease with which we retain

them in the memory, under their present appellation, must greatly retard the progress of a new nomenclature:—And notwithstanding the ‘brevity and the euphony’ of Mr. Woodward’s classical terms, we are afraid that almost every people will still continue to call the sciences by their old home-made names. With all our good wishes on his side, therefore, we cannot flatter the author with the prospect of much success. We must not be set down with the absolute ‘desperati.’ p. 238. We hope his system will be universally adopted,—but we do not much expect it.

Upon the whole, we think this is a curious, and not uninteresting book. However much men may differ as to the utility of his labours, we are sure that nobody will deny Mr. Woodward the praise of originality. His friends can claim but a very small share of the approbation or dispraise which may attend his work; for though he seems to be very fond of asking advice, and of detailing it at full length, we seldom find him quitting his own proper opinion for that of any other person. He is one of those men who first make up their minds on a subject—and then seek the council of their acquaintances. We have no hopes, therefore, of convincing him that our own nomenclature is better than his;—nor do we much expect to see his succeeding volumes less overloaded than the present with useless information and uncouth phraseology. We have no objection, however, to employing a few hours of leisure in observing the movements of such a character; and whenever the supreme court of Michigan territory is not in session, we hope Mr. Woodward will come again into the Atlantic borders, and enlighten us with another quarto. We dove to the bottom of our pool, to be sure, when this great volume first dropped amongst us:

Terruit urbem—terrui gentes;  
but its presence has now grown so familiar that we go all over it without the slightest apprehension of danger.

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ART. II. *A Sketch of the State of Medical Science in this Country; with a brief Account of its Origin, Progress, and Present State on the other Continent.*

**T**HE science of medicine rests upon an extensive basis. It derives from the mineral and the vegetable kingdoms the materials with which it operates, in curing diseases. The knowledge of the systems of animals, traced in their infinitely varying progression from the plant to man himself, still growing more complicated as we recede from the one and approach the other, develop in a vast number of natural experiments, made in the great laboratory of life, the relations of that curi-

ous and subtle property, and complete in the examination of the structure of man,—of the functions of his body in health and in disease, the course of the physician preparatory to his last and most important duty,—the practice of his art. Chymistry then supplies from the mineral, botany from the vegetable, natural history from the animal kingdom, their respective productions; whilst the sciences of anatomy, of physiology, of pathology, and the practice of medicine, complete the circle of medical knowledge by making known successively and in order, the structure of our frame,—the functions in health and in disease, together with the application of remedies to remove it.

These sciences, confessedly among the most important which can claim the attention of our species, have appeared almost in every community. Deriving our support, when in health, from bodies around us, it is a sentiment as natural as it is universal, that we should look for assistance in the same great store-house of supply. Accordingly we discover that even animals have their instincts; which prompt them to seek relief for their maladies, in articles of diet to which they are not accustomed; and among savages the knowledge of roots and of herbs, of charms, spells, and incantations, are as ancient as history itself. In the more authentic records of this science, however, we trace its origin to the shores of the Mediterranean. In Egypt, a country to which Greece looked for her most important assistance in every mental pursuit, this useful study was unquestionably cultivated; and though it was, at the best, little more than an empirical art, yet the knowledge of anatomy, acquired in the practice of embalming, and the regard paid by the laws to the administration of remedies, are data sufficient to prove that at least the practical part of the subject must have been considerably advanced. Greece must of course be mentioned next;—for while the Athenians took the lead of their cotemporaries in almost every thing else, they were by no means behind them in the practice of medicine. Hippocrates appeared when Athens was nearly at the height of her prosperity; and he enriched his profession with a vast body of facts and observations. He was succeeded by men of respectability; but they were overshadowed by the monuments which he had reared, and are hardly known in the history of their country. In Rome, also, towards its meridian there appeared many luminaries in medicine, who were pre-eminent from the splendour of their doctrines and the vast harvest of intellectual productions, which arose beneath their influence. They extended far over the empire, a medi-

cal tyranny which free discussion, accurate experiment, and just induction have for some centuries subdued. To state their theories, would be to conjure up the gorgons of error, and to people the regions of truth with the visions of distempered science. In tracing generally the progress of medicine, it is sufficient to say that it arrives at its acme, in every kingdom where luxury diffuses its poisons; where wealth is abundant, and offers with liberality to reward the servants of its pleasures, or looks with anxiety and fear at the awful termination of those enjoyments, for which so much time and money are mispent. Such is the natural place of this study on the chart of history. In Europe, where vast resources of learning and industry have been employed, it appeared early. During the first periods of that wonderful assemblage of religious and civil establishments,—as if disjointed from its place in the progress of their policy, it received and wore the livery of every science which reared its head above the surface of discovery. It became successively mathematical, chymical, and electrical, according as each science gained the ascendancy. But it has now acquired a more independent character. It is a subject of familiar conjecture, that the progressive melioration and refinement of the ways of life must gradually circumscribe and deteriorate the practice of medicine;—but the fact is directly the reverse; and it seems, indeed, to be in the nature of things, that all the sciences should advance to certainty and perfection, exactly as mankind advance in the progress of civilization. Improvements in the ways of living appear generally to be nothing but the introduction of new luxuries, or the modification of old ones: in either case, they increase the demand for medical labour, by opening new avenues to disease; and as inventions and discoveries in any employment are always proportional to the number of labourers employed, the age of civilization is the very period in which medical science may be expected to approximate the highest stage of melioration. Such is its present state in the civilized world:—but we must now proceed to give an account of its particular state in that portion to which ourselves have the good fortune to belong.

This country stretches from the 30th to the 47th degree of north latitude; it embraces a vast diversity of climate and of soil;—exhibits the animal and the vegetable kingdoms, in all their variety; and as the human frame is, in its various portions, exposed to almost every species of temperature and treatment, there can hardly be named a single disease which does not exist in the United States. As they are flanked on one side by an impenetrable forest, and have an ocean

equally extensive on the other, the comparatively narrow tract which they embrace is subject to the dominion of the winds produced by these two great natural magazines. Our seasons are accordingly in perpetual variation; though, at the same time, the cold predominate in the north, and the hot in the south;—while those of the middle states are constantly vibrating from the one to the other. Nothing, in short, can exceed the variableness of our climate; and we truly say with the Spectator, that we frequently ‘lie down in July, and rise in December.’

In Pennsylvania, there are seldom more than thirty or forty days of summer or of winter, in which the mercury rises above eighty, or sinks below thirty degrees of Fahrenheit’s thermometer. The winter generally commences about Christmas, and continues till the beginning of March: April is raw and often showery; May still retains the moderate coolness of spring; June introduces summer; July and August are the hottest months; but in September the mornings and evenings begin to be cool, whilst the days are pleasant and delightful. The season is then generally the most equable, and the country the most attractive. The trees are variegated with foliage of a great variety of colours; and instead of the sombre and melancholy drapery of European forests, they have a gay and enchanting appearance, which astonishes strangers who visit our country.

In summer we have days which are uncomfortable without fire, and in winter some which are disagreeable with it. Garlic, a vegetable which is common in the eastern parts of the states, has appeared in January; other plants have blossomed in December and in February; and yet in the very same months the thermometer has sunk as low as twenty-two degrees below 0. The autumn and spring exhibit all these varieties;—more particularly the latter; which is still affected by the contests of the sun, growing every day more powerful, with the northern and western winds sweeping across the vast surface of the continent, between the United States and the Pacific ocean. Pennsylvania exhibits in the spring the moisture of the British isles; the heats of the tropical countries, in the summer; the sky of Barbary in the autumn; and the atmosphere of Russia in the winter. There is no month in which frost has not made its appearance, or in which fires have not been found necessary. Taking the climate of Pennsylvania, then, as our point of observation, we see a vast continent, surrounded on the north and west by extensive forests, stretching their almost immeasurable bounds to an ocean many thousand miles distant, and experiencing in its extent the cold of the arc-

tic circle, the moderation of the middle latitudes, and the heat of the torrid zone; on the south a burning country, moderated and broken by huge mountains, and on the east by an ocean equally extensive as the forest on the west, and equally fruitful in storms and variable seasons. The consequence which naturally attends our position between these two great natural deserts, is, as was before observed, that unceasing changes are taking place in our climate. The north differs from the south in having a surface more vexed by winds,—though cold predominates; the middle vibrates alternately to both extremes; while the south is more under the climate influence of the sun.

As the western sections of the country are divided by the great mountains, they have in general a milder temperature than the eastern. The effects of the winds upon health are pretty accurately measured by the following arrangement: as the north and north-west are rendered severe in winter by passing over interminable snows,—but moderated and moistened in summer by accompanying rains, they alternately invigorate, and relax the inhabitants of the states and territories which lie in the line of the Mississippi. Proceeding to the south, the winds traversing the ocean in that direction, Mexico and the south-western states, lose some of their moisture, and have a still more debilitating effect; which increases as we proceed towards the east till we come to that quarter where cold and moisture both combine to affect the wind in the highest degree. We find few men above forty who are not susceptible of its chilling and depressing effects. The cold and dry air of the north latitudes, the moist and relaxing air of the south and west, the chilly raw currents from the eastward form, in general, then, the character of the winds which disturb and perplex our climates.

Our mode of living, with regard to dress and diet entirely resembles that of our English brethren. Coffee, bread, meat, and butter, constitute our breakfast; domestic animals and vegetables which are eaten by the Europeans, furnish our dinner; whilst the third and the last meal generally consists of tea and bread, with perhaps a little animal food. Our drinks are also nearly the same; the native liquor distilled from rye, constituting the beverage of the labourer; brandy, gin, spirits and Madeira wine, that, of the higher classes. We differ from our brethren over the water, however, in eating more animal food, and drinking more spirituous liquors; though, as to the latter article, perhaps, it may safely be said, that the consumption of these destructive and pernicious stimulants increases

by degrees as we go from the north to the south. In the eastern states, the people are thrifty, active, and industrious,—drinking little ardent liquor of any kind: but as we approach the middle states this vice augments, while the labour necessarily decreases; and when we come to the southern districts we see intemperance prostrating her victims on every side, and bringing along with her the usual train of lazy habits and dissolute morals. If we have any vice which can be called national, we believe it is *intemperance*. The quantity of liquors consumed yearly is prodigious;—and, as it is no inconsiderable item in the diet of the labouring classes, an attempt to suppress its consumption by excise laws would only be covering an evil which it seems impossible to crush. The essay to suppress the Scotch distilleries should furnish a lesson on this subject.

With regard to our diseases, pleurisies, rheumatisms, inflammations generally prevail during winter in the northern states. Catarrh, too, is common, and often terminates in the consumption; which may be called the endemic of the country. In some districts and seasons one fourth of the number of deaths are from this cause. The various forms of quinsy occur frequently; nor are local inflammations of the internal parts of the body by any means uncommon.—The eruptive diseases,—such as the scarlet fever, the measles, &c. occur generally at the interval of three, four, or more years:—but the small-pox, since the introduction of the vaccine, has certainly been suppressed as far as the irregularities of poverty, ignorance, and prejudice will permit. It is a lamentable truth, that this loathsome disease is still seen in our cities,—and that during the last year, the number of cases was numerous, and the deaths not infrequent. It pervaded many of the cities on the eastern coast, and was considerably fatal. The sailors conveyed it from one port to another; their desultory and wandering life rendering them liable to contagion from frequent exposure as well as from their not having received the benefit of the Jennerian discovery. The plague, exactly in the form which it wears in the old world has seldom appeared in our country. The disease of Pemphigus, and miliary fever, are not often seen. Aphæ and cholera, particularly among young children, appear in the summer, when the heats are great. The nettle rash is common among the adolescent,—but more rare in adults. Hæmorrhages, both active and passive, are known in all climates of the country, and cannot perhaps be said to belong to one district more than to another,—excepting that from the lungs; which is not uncommon in the northern districts, and most ge-

nerally precedes consumption. In the southernmost regions it is almost unknown. Hemorrhoids are often an affection of the old; and perhaps, indeed, it may be said that, with respect to this disease, as well as to others, not immediately connected with our variable climate, we resemble the inhabitants of Europe. With regard to the diseases peculiar to the sex the same remark may be made.

Apoplexy and palsy are often the result of intemperate habits; in the middle and southern states particularly. They are the diseases of which the aged die, in the concluding months of winter, as well as at the beginning of spring or of autumn. The active habits of our countrymen render hypochondria more rare than in Great Britain. In the northern states the tetanus or lockjaw, is uncommon, in summer, and never occurs in winter. In the middle states, it is dangerous to receive a wound, particularly a lacerated one during the warm season, without using stimulating remedies to prevent this dreadful disease. In the southern, it is not at all infrequent in summer, and it sometimes occurs even in winter. In the former seasons it often proceeds from a cause, viz. exposure to the night air, which in the northern states is never known to produce it. Of epilepsy, asthma, and St. Vitus's dance, there is nothing peculiar to be said with regard to our country. The water rash, and indigestion, are often the result of intemperance: they are confined to no particular district, or tract; and may be said to attack in the common forms and from the ordinary causes. Hydrophobia appears not unfrequently; and is often symptomatic,—though it most commonly arises from the bite of rabid animals.—Madness, indeed, may be supposed to arise in this country from the same occasional causes, as in Europe. It appears in families, and descends by hereditary succession; often disappearing in one branch, or generation, and making its appearance again in another. Sometimes, high-toned pride, intemperance, excessive headachs or eccentricity, in a parent, becomes mania in the next generation; while on the contrary, they leave a family in a reverse order. Religion and losses in business, may perhaps be the most frequent causes of this disease, though from its connexion with hereditary predisposition, it is often difficult to trace its causes with accuracy.

Dropsy is believed to be less common, than formerly, and is now a very manageable disease, where the constitution is not absolutely broken. It generally occurs among the poor, the irregular, and the intemperate. Rickets rarely appears; though it sometimes affects the negroes, and particularly negro chil-

dren. Scrofula occurs more frequently; and is generally manifested in diseased mesentery glandular swellings, and ulcers of the soft parts, with carious bone. With regard to the disease resulting from impure connexion, it may be supposed, that, in a country, where population is extended on a scale unknown in any other quarter of the globe,—where all the delights of life rouse and stimulate the body, the diseases of a function so intimately connected with the general health should naturally be common. Accordingly, it may be said, that among the labouring classes, particularly in the cities, there are few individuals, who have not had their constitutions seriously affected by frequent contaminations, by injudicious exhibitions of mercury, or by suffering the malady to go imperfectly cured or totally neglected. To give the general reader a view of the state of diseases in our country we would say, that malignant bilious fevers of remittent or an intermittent type prevail most in the summer and beginning of autumn; catarrhs, pleurisies, inflammations, rheumatisms, typhous fevers, in the approach and progress of winter, as well as in the commencement of spring,—and that the other diseases, which have been enumerated, are regulated in their appearance by irregularity of living, by the decay of nature, and by the other numerous and varying accidents of life and of climate. Accordingly in the north, where winter has the sway, the remittent fevers of the summer are more mild; and the inflammations more severe. But in the south, the contrary takes place,—the fevers being malignant and deadly; whilst inflammations, pleurisies, catarrhs, and consumptions, occur seldom or are entirely unknown. In the middle states, on the other hand, where the climate is alternately tropical and arctic, we have, according as the one or the other season prevails, the malignant fevers of the south,—or the consumptions, the inflammations, and the pleurisies of the north.—From this view of the climate and diseases of our country, it need not be said, that various districts have various degrees of health; that marshes, high-lands, and mountainous regions diversify, the temperature of the air, as well as the character of disease; that epidemics appear in districts, for many years blessed with health; and that while there are endemics, which never leave particular regions,—there are other regions which, at all seasons and in all years are entirely free from diseases of any kind. It is from this circumstance,—from the revolutions, in the maladies, which have afflicted particular parts of our country, that our medical character derives its pretensions to celebrity.

The prevalence of the typhous fever in New-England, of late years, and of the yellow fever in Philadelphia, in 1793, and in several succeeding years, afforded opportunities for the trial of medical skill which perhaps were never before excelled. Our practitioners were not unequal to the task which they found themselves obliged to undertake; nor did the results fall short of the expectation which the opportunities and the men would have led us to form. The views which the varying forms of these diseases have given of the principles and state of the human constitution,—the extensive comparisons which it induced between the experience of ancient and of modern times,—have elicited opinions on the subject of contagion and of disease generally, which will be of great and lasting benefit to the world. Its consequences upon commerce, in the promotion of correct views respecting quarantine, and, of course, upon agriculture and manufactures, render these doctrines peculiarly interesting.

Formerly it was believed that the plague in Europe, the yellow fever in the West Indies, and the typhus which is confined to no particular districts of the globe, were caught by means of an infectious and occult something, communicated either by the contact of a person diseased, or by some subtle influence in the atmosphere. In Europe about half a century ago the great body of the profession did not condescend to examine accurately how this effect was produced: the matter was enveloped in mystery; and though the health, the perspiration, and the confinement of the sick in low, damp, neglected situations, were supposed to contribute to it; yet the ideas of medical men upon the subject were confused and indefinite; and no one had the courage to think of coming at the truth either by investigating the actual facts, or by reasoning from general principles. The immense collection of materials made by accurate observers from every quarter of the globe, and under every kind of circumstance, together with the happy general classification and views of the causes of disease, and of the principles of the system,—gave the physicians of America a great advantage over those who had preceded them on the other continent:—and though from the subtlety of the causes which operate in producing these morbid changes, the attainment of absolute certainty is almost impossible, yet the industry and the genius which signalized the dismal time when those diseases prevailed, have done much to remove the obscurity in which they were before enveloped and have brought the whole subject of contagion before the public, accompanied with new and important observations. To delineate as exactly as we can, the present state of the doctrine concerning fevers, we proceed to observe, in

the first place, that the human system consists of a mass of materials organized and regulated by certain fixed laws, and possessing properties peculiar and different from all other bodies. In every part there is constantly taking place a series of compositions and decompositions, of which our aliments and our drinks supply the subjects and materials. The useless portions are thrown out upon the surface of the body in the perspiration; from the lungs in the breath; and from the other emunctories in their appropriate discharges. The rejection, then, of substances which are useless to the system, forms one of the great operations of the living machine. From the unity and harmony of its constitution every sense regards as disagreeable the substances thus eliminated. As the body therefore is composed of matters which are collected from the external world, it is subject to various derangements, disorganizations, and diseases; of which fever is the most common and general. In its most usual form it consists first of a chilliness, which lasts from a few minutes to as many hours,—is then succeeded by a corresponding heat, which is equally general and various in its continuance,—and is finally terminated by a perspiration which continues, like the other two symptoms, either longer or shorter, according to the constitution of the patient, or violence of the disease. Fever, then, is often simple. Its operations and effects, however, are complicated, and it personates all the affections of the body; insomuch that, in some instances, a high degree of healthful feeling is the precursor of approaching death. In this immense diversity of symptoms, the physician is often left without either sky or compass, and must take for his guide the predominant character of the diseases then prevailing; which, if properly understood, will, in general, conduct his patient successfully to health. With regard to the treatment, there are three distinguishing characteristics, on which it principally turns;—whether the fever is high, or moderate, or low. If the fever be *high*, it becomes necessary to abstract all those agents, which tend to strengthen and support the body; if *low*, it must be excited by food and drink of a stimulating nature; if moderate, the two extremes must be avoided, and according as the patient tends towards either, the treatment must be stimulating or the contrary. Such, then, is the general outline of the phenomena attending fevers,—one of the most numerous classes of diseases to which the body is subject. The impurity of the air, and the putrefaction of animal and of vegetable substances surrounding us, have been supposed to be its causes. The disagreeable impressions made by the latter on the sense of smell, and its pernicious effects upon the lungs, when inhaled in respiration, render the opinion probable. From this

point has arisen the disputes among physicians in relation to contagion. Are diseases propagated by a subtle and occult substance which communicates its influence through the skin, like the matter of small-pox,—or by the putrefaction of vegetable and animal matter, acting through the medium of the breath, of the saliva, and of the food which carries it to the stomach? Whilst some imagine that bilious and malignant remittent fevers, are produced by vegetable and animal matter, in a state of putrefaction; others again, believe that agues are the only effects of such a cause, and refer to cold, in its vicissitudes, the various forms of this disease, which so extensively afflict the human species.

The plague, which is unquestionably a species of fever, is confidently believed to be communicated from the clothes of persons who have died of the disease; and it is no less certain, that the lower species, commonly known by the epithet nervous, and lately by the typhous fever, arises from the same cause,—the putrefaction of the animal secretions adhering to the clothing, for which it has a strong affinity. The question is important; for whilst one party believes it proceeds from the decomposition of matters every where around us, they assert, of course, that the disease has a domestic origin; and according as their belief is more or less exclusive, are more or less disposed to reject all quarantine laws, and to trust to those precautions which prevent its introduction from domestic sources: and, on the other hand, those who refer it only to the human body, regard foreign causes as the most probable, and are equally obstinate in thinking precaution at home to be unnecessary.

The arguments commonly adduced to prove that the yellow fever has its origin in animal and vegetable putrefaction, and not in contagion, are principally,—that it appears in marshy countries, where foreign intercourse is impossible,—that it does not spread in the West Indies, in the country places in America, nor in hospitals,—that it is impossible to communicate it by inoculation, or by swallowing the black matter ejected from the stomach,—that the yellow fever is similar to other diseases, which evidently arise from marshy ground and animal putrefaction,—that the disease never attacks whole neighbourhoods at once, but appears in a sparse and scattered manner over a city,—that it is extinguished by cold weather, a fact which is incompatible with contagion,—that it does not appear in situations, or in climates, where the heat is moderate, as in Great Britain or in France,—that physicians, who, were it contagious, must certainly have taken the disease, are seldom known to be infected,—and that every attempt to arrest its progress, by the separation of the sick from the well, has proved completely

abortive. On the contrary it may be alleged, that this disease often resembles those of a low character, which are denominated typhus, and which are supposed, on all hands, to arise from contagion, and to be manifested in the spotted skin, in the derangement of the mental faculties, and in the black discharges from the stomach and the bowels. What still more corroborates this position is that, as in the typhus,—particularly that which has appeared of late years in our country,—it has personated every other disease: and when we add to all this, that the poor never remove the impurities of their neighbourhood, we must acknowledge that in all seasons the sources of contagion must be open, and that of course the disease, if contagious, may originate among them at all times. But the very contrary takes place.—Again, did the disease arise exclusively from the putrefaction of vegetable and animal matter, it would show itself in every year and in every district of our country, during the season favourable to that process. The subtlety of the causes, which produce these diseases precludes entirely the supposition of any certain influence from the circumstances above mentioned. Extreme heat, which relaxes the body, may be the direct cause of fever, and putrefaction only the occasional, or exciting cause. It is well known, that our system is eminently susceptible of being acted upon by stimulants, which are extremely subtle. The odour of whortleberries, for instance, has produced fainting; mania and nervous affections have been caused by the music of the harmonica; excessive debility has arisen from the sight of particular animals, even though innoxious; violent fevers have proceeded from the crews of different vessels visiting each other, though they were perfectly healthy before; and cattle free from disease coming from remote districts sometimes exhibit similar phenomena, when they are permitted to eat in the same pastures:—All of which proves pretty evidently, that the causes which unpin the chords, and destroy the harmony of the system, are too subtle to be accurately known. As the matters constantly eliminated from the body, therefore, are discharged because they are, in the first place, useless and unnecessary to our sustentation, and, in the second place, become highly offensive to our senses, it must in all cases be proper to guard against external contagion, and to consider the admission of a disease from abroad as not only a possible event,—but as an occurrence which is rendered probable both by analogy and by fact. At the same time, too, we should be equally on our guard, lest an enemy so insidious and so subtle should come upon us from within. Upon the whole, then, it is extremely difficult to know with precision the causes of fever; because, in the first place, they are insensible; be-

cause, secondly, the progressive steps of their operation can hardly ever be accurately traced,—and because, thirdly, it may proceed, at different times, from many and varied sources; such as the constitution of the air, or of the earth, perhaps; the substance of our bodies (which vary, in all probability, in different seasons, and in different districts of country); the putrefaction of vegetable and of other substances; and lastly, the perspiration of animals in perfect health, or in disease. Such is the general outline of the facts and discussion which this subject has produced. They are of the greatest importance to our species, and must unquestionably lead to important results with regard to the regulation of our intercourse with foreign nations, as well as with one another.

In leaving this subject it may be proper to remark, that in consequence of the excessive alternations and varieties of our climate, the malignant fevers of the summer, in its northern districts, are distinguished by rather a low type, and will not bear depletion; in the middle, they are more inflammatory; while in the south, again, they correspond with those in the north. And it is somewhat extraordinary that, from a contrary cause, a set of diseases produce weakness in the south, and will bear less debilitating remedies than the same diseases in the middle states. The remedies for malignant fever are nearly the same as were employed fifty years ago; with the exception that mercury is now more common, and is certainly effectual when it produces its peculiar operation on the mouth. This is true of fevers generally, though not without some exception; inasmuch as we discover cases,—those particularly of intermittents,—in which they continue, during salivation, unaffected by medicine. The fevers of a low type, which have of late years so often appeared in our country,—particularly in the north,—require, we think, a more specific examination. The common long protracted form of nervous or typhous fevers, which continue from ten days to two or three months, and which afflict Britain and the north of Europe, are not uncommon in our own country during the season of autumn. They are regular, however, and appear in scattered cases every year, succeeding to remittent fevers of the summer; or assuming their most dreadful form, from the first attack, in low and marshy situations. The low fevers which have appeared in the northern districts of the United States, exhibit, in general, their characteristic symptoms from the first attack, and sometimes terminate in no more than twelve hours. They personate every disease,—even the common nervous affection of hysteria, migraine, and low spirits. In some instances, too, there is no symptom but debility; and the patient gradually sinks into his

grave without a murmur,—often so listless and so feeble as to complain of the trouble of taking medicine, and to beg that he might die in peace. This disease, which has always occurred in the autumn and winter, continues, in damp situations, sometimes late in the spring, and, when the summers are cool, even till the latter end of June. In its treatment, depletion is almost always improper. External heat, liberally applied,—gestation in a carriage, when practicable,—the application of blisters, where there are internal pains,—and the administration of stimulants, such as wine, brandy, nourishing food, repeated frequently, but at short intervals, and continued when there are no signs of inflammation,—constitute the general practice which is observed towards the disease under consideration. Let the strength be supported; but avoid continuing the remedies till they produce oppression, confusion, or disturbance either of the faculties of the mind or of the body. This disease appeared in Connecticut in 1807, and went through the New England states like a besom of destruction. It has continued to appear, every winter and autumn, in every section of the United States—except their most western extremity; from which we have no positive information: North and South Carolina have experienced its ravages; and for the last three years it has been no less mortal in Virginia and in Pennsylvania.

Without entering into farther detail with regard to the diseases of this country, it may be observed generally that the malignant and bilious fevers triumph in the summer; whilst the typhus reigns over the dreary and unsettled seasons of winter and commencing spring. It may be said of our diseases as of our climate,—that every region exhibits all the varieties of heat, of cold, and of malady, which attack the human body,—and that typhus appears in those seasons, when we are weakened by cold and moisture, and those of an opposite character, when excessive heat produces the same depression of the system. The appearance of intermediate genera is determined by the peculiarities of soil or of atmosphere. With this general view of the climate and diseases of the country we proceed to state the sources of medical information, together with our general character respecting it.

The northern states are distinguished for mental and bodily activity; and their colleges are more numerous, and better endowed than any others. In their large towns, the character of the profession is respectable,—as much so, perhaps, as in those of Europe; and in the country there is a great deal of accurate practical information respecting diseases, as they appear in particular neighbourhoods; while general learning or theoretical

knowledge is very rarely to be found. In all districts there are many empirical practitioners, who live by vending nostrums, and deception of various kinds. As to medical science, the middle and southern states must be confessed, we think, to have the precedence. In natural history, the latter, particularly, excel; as a taste for the study appeared much earlier in the southern than in the northern districts of the country.

About the year 1740, Dr. Cadwallader wrote an essay upon the iliac passion, which has been mentioned with approbation, and since that time, the names of Tennant and Mitchell, of Virginia, have acquired celebrity. Dr. Bond, Gale, Lining, Chalmers, Garden, Colden, Ogden, Jones, and Maclurg, have produced respectable works upon various subjects connected with medicine; and more lately the professors of the New York and Pennsylvania schools have written with great credit and ability.

Our countrymen have been particularly distinguished for their development of the general relations subsisting between diseases,—for a more ample and correct view of nosology or systematic arrangement,—and for observations on the nature and cure of malignant fevers,—on quarantine,—on the use of mercury in diseases generally,—on the nature of dropsy,—on the doctrine of cutaneous absorption,—on digestion,—and on madness. Besides treatises on these subjects, a great variety of miscellaneous tracts on others have occasionally appeared. Dr. Rush was certainly the most distinguished medical character of this country. He united a rare talent for observation, to great brilliancy of fancy; and it may be said with truth, that his work upon the yellow fever, contains more knowledge beautifully and perspicuously arranged and detailed, than any original medical work which has appeared since the time of Sydenham. The theories of the latter, like those of the former, were often defective, and prove certainly that his judgment and his talent for generalization was inferior to the other powers of his mind. He has been honoured by many of the foreign potentates of Europe; and for variety of observation,—for activity, industry, and genius, perhaps he has never been excelled in any country. Dr. Miller of New York is distinguished on the same subject. Dr. Mitchell and Dr. Caldwell have written creditably upon quarantine, and upon other physical and medical subjects. Dr. Currie of this city has collected much useful information on the diseases of this country; and Dr. Barton, jun. has written a book upon hospitals, containing a great variety of useful information, which cannot elsewhere be procured. Dr. Hosack, of New York, has also attained great eminence in his profession by a liberality of patronage in encouraging medical

learning, unknown before in this country. He established a botanic garden, at a vast expense, from his private fortune: which was afterwards purchased by the state of New York: and he has written with great ability upon contagion, as well as upon other subjects. To great activity, he unites much learning; and is an ornament to his state and country. Since the late war, this gentleman and Dr. Mitchell have been made members of the royal society of London;—an honour to which Dr. Franklin, Mr. Rittenhouse, Colonel Humphreys, of this country have been admitted. It has been observed, that, since the late contest, the Americans, and, in particular, those who have been distinguished for learning or science, have met with a more gracious reception than they formerly did in the old world. Dr. Barton also has occupied an elevated place in the medical reputation of this country. His researches were principally directed to natural history; though upon the materia medica of the United States he has made collections which reflect great honour upon his memory. His treatise on goitre is respectable; and though it does not throw much new light upon the subject, yet it deserves to be mentioned among those who do honour to our country.

In surgery Dr. Physic stands without a rival in this country, and as an operator particularly, perhaps without an equal in any country. In his department of medicine; (in which so much has already been done,) he has introduced several material improvements; of which the practice of applying blisters to mortified flesh, and the mode of producing union by the introduction of a seton, between the ends of fractured bones, already become cartilaginous, and do not otherwise unite, are the most prominent.

There are several eminent teachers in the schools of Philadelphia and of New York; among whom may be mentioned Dr. Wistar, professor of anatomy, and the president of the American philosophical society in Philadelphia. He has introduced models of different parts of the body upon a large scale, to exhibit more clearly, and with greater precision, the various portions of their structure. His exertions for the propagation of medical knowledge; and, indeed, his acquirements, both general and professional, undoubtedly entitle him to a place in the first rank of medical celebrity. Dr. James is high as a teacher of midwifery.—There are several other medical gentlemen who would deserve to be particularly noticed,—were we not, in this paper, confined to a mere outline of the subject. Of these the most conspicuous are Dr. Chapman and Dr. Dorsey; the former of whom is distinguished for genius and eloquence,

and the latter as an excellent and able teacher. He has published an elementary work on surgery, and has distinguished himself by the use of the gastric fluid as a solvent for urinary calculus. The dissertations of the medical graduates have been respectable, and original. The first medical institution was founded in Philadelphia in the year 1762, by Drs. William Shippen and John Morgan, natives of Pennsylvania. In 1769, it consisted of five professors, who taught respectively anatomy, the institutes of medicine, materia medica, chymistry, and the practice of medicine by the demonstration of cases at the Pennsylvania hospital. In 1764, the number of pupils was only 10; it is now about 450; one-fifth of whom graduate.--In New York a medical school was established in 1767; and lectures were instituted upon anatomy, physiology, and pathology, surgery, chymistry, materia medica, midwifery, and the theory and practice of physic. The college was shut up during the revolutionary war; and though it was revived in 1784, the delivery of lectures on the above-mentioned branches of medicine did not commence again till 1792.\* In the year 1781, what in chronology may be called the third medical school in America, was founded in Cambridge, in Massachusetts. Like that of New York, it was suspended for several years; was re-established in 1783 with three professors; the number has since been augmented; and the institution is expected shortly to become useful and flourishing. A course of medical instruction is also given at Dartmouth college in New Hampshire; but its efficiency has of late been much crippled by political dissensions. There is further, a college at Providence, Rhode Island, which is devoted to medical as well as general instruction; and promises at present to become a considerable school.—Medical institutions have been established in Kentucky, at Lexington, and at Baltimore, in Maryland. The former was founded in 1799, and since that time been in a languishing state. It is about to be generally re-organized, however, and enlarged by the addition of some new professors. Its funds are considerable: but they consist entirely of lands, which are comparatively unproductive; and here, as in all the medical institutions of this country, the professors depend,—not upon a regular source of patronage,—but upon the contribution of the students. The school at Baltimore is flourishing, and has several highly respectable professors. These are the principal institutions of medicine in the

\* A school of medicine has lately been established in the western part of the state of New York;—but its distance from any large town, and the consequent difficulty of procuring a requisite number of subjects, will be almost an insurmountable obstacle to its progress.

United States. In that of Pennsylvania, which has undoubtedly the pre-eminence, five new professors have lately been added; those namely, of comparative anatomy, of natural history, of botany, of chymistry applied to the arts, and of natural philosophy.

Medical improvement advances in this country with a rapid pace. The laudable emulation which exists between neighbouring cities, as well as that which leads individuals to distinguish themselves, induce the establishment of schools in every part of the union, where there is any prospect of patronage. In Richmond, in Charleston, and in Savannah, they have been seriously contemplated, and will no doubt be soon established. The institution of hospitals is also to be attributed to the activity of medical men, as well as to the philanthropy of the charitable. In Philadelphia, the Pennsylvania hospital has more celebrity than any other in America. It is furnished with a good library, an anatomical museum, has extensive wards for the treatment of the insane, and admits a considerable number of patients afflicted with other diseases. It was established in 1756.—The picture shortly expected from Mr. West representing our Saviour healing the sick in the temple, is said to be a master-piece, and will no doubt yield to the hospital a considerable revenue. There are institutions of a similar nature established at Baltimore and in New York, as well as in some other cities of the continent: and the public spirit of their respective states renders it probable that, they will sooner or later be extensively useful. With regard to this department of civil organization, it may be said that every county of our numerous states provide for the sick poor by the establishment of almshouses, which, on account of the rapid increase of our population, will unquestionably contribute to develop on an extended scale, the nature of diseases and the mode of treatment.

In order the more effectually to promote medical science, various colleges and societies have been formed in all our principal seaports and in some of our country towns. The members hold occasional meetings for the discussion of medical subjects,—for the publication of new facts and new doctrines,—and for the regulation and arrangement of the practical concerns of the profession:—And indeed it may be observed generally that medical associations of every kind increase with the augmentation of knowledge upon other subjects. They arise from the ambition of a few individuals who wish to be distinguished. They sometimes divide from faction, and often dwindle into insignificance from neglect. Some regenerating spirit again breathes into them the breath of life: and thus the medical population presents a continual succession of composi-

tions and decompositions: which, first and last, however, contribute to throw considerable light upon the prevailing doctrines of medicine. Our labours have not yet been such as to make us celebrated for any great profundity of erudition or grandeur of results. As we have, an adequate number of medical labourers, however, the insufficiency of former results should not depress our hopes of future success. The number of pupils yearly in the schools of medicine amount to about eight hundred; and besides these there are a vast number let loose upon the community from the offices of country practitioners of inferior note. The character of the faculty is in general highly honourable; though, like every other liberal profession, it brings into play all the little passions, which deform our race. In all the states the profession is respected; and in the southern particularly it stands high, and is pursued because it is creditable. It is believed to be both respectable, and, in some districts, essential, to attend the lectures in the cities, in order to complete the course of education:—And as the professors receive their patronage from the students, and in proportion to their celebrity, they have every stimulus to exertion. The revenues of the professors in Philadelphia are high; amounting to between seven and eight thousand dollars from their classes, and in general between three and six thousand from their practice.

The elementary works are read by the students; and as three years are often allotted to the completion of their studies, the profession has, as might be expected, many highly respectable members. In new countries, however, the people are often more ignorant and indifferent to character, either intellectual or moral; and it is just to state, therefore, that in this country many medical men enter on the practice without being thoroughly prepared. The young men have, in general, a great deal of good sense, united with a high spirit of independence: And as the merits of their professors are freely descanted upon, they generally form pretty accurate opinions of their talents and of their moral principles. In its medical character our country resembles very much the United Kingdoms; where it is customary for more than one half of the pupils at the universities to commence the practice without longer preparation than the term of a year. We have three denominations of practitioners; the first of which may be called the thorough bred,—the second the moderate,—and the third the ignorant and empirical.

With regard to the laws which have been made for the protection of the profession; Maryland, New Jersey, Ohio, and some of the other states, have appointed committees for the

examination of practitioners, and for the suppression of empirics. The progress of opinion respecting the true interests of the community, will no doubt soon render such provisions general. Our apothecaries are permitted, however, to sell without restraint whatever drugs they please; and dangerous accidents often result from the low state of our art in this department.—In a few instances, legislative aid has been afforded to medical institutions; and it is gratifying to witness in our country, now composed of twenty independent nations, that public instruction and the dissemination of useful knowledge has been so general; and that philosophical and scientific societies and schools, are rising in every quarter of the Union.

The religious and moral character of the profession ought not, by any means, to be overlooked. The appearance of the doctrines of Brown,—who explained all the phenomena of the human body, by attributing to it a quality, which distinguished it from inanimate matter, and made all its changes dependent upon the action of our food, drink, heat, and the air we breathe,—disjoined the religious principles of its members, and for the last twenty years produced more deists than perhaps was ever before known. His opinions led to the belief that the body and the mind were the result of a certain number of agents in constant operation,—and that they cease to exist as soon as their agency is withdrawn. The immortality of the soul, and a future state of rewards and punishments, was of course rejected; and along with it every other doctrine which raises man above the beasts that perish. One would suppose, on the first view of the subject, that the examination of the human frame would be the last cause of scepticism; and yet it is a fact, that the great body of physicians in the United States have very little of what other men would call religion. In the worldly sense of the word, however, they cannot in general be said to be immoral men. Mr. Stewart, (speaking of those authors who have embraced the theory of materialism,) has very good remark upon this subject. They ‘consist chiefly of men whose errors are easily accounted for; of physiologists, accustomed to attend to that part alone of the human frame, which the knife of the anatomist can lay open; or of chymists, who enter on the analysis of thought, fresh from the decompositions of the laboratory; carrying into the theory of mind itself, what Bacon expressly calls ‘the smoke and tarnish of the furnace.’\* *Magni est ingenii* (says Cicero,—but Mr. Stewart does not go quite so far) *revocare mentem a sensibus, et cogitationem a consuetudine abducere.*

\* Account of the Life and Writings of Dr. Reid.

ART. III.—*Quinze Jours a Londres, a la Fin de 1815.* Par M. \* \* \*. Paris, 1816. 12mo. pp. 211.

**F**RENCHMEN have a right now to their turn at calumnation. For more than twenty years the English have enjoyed almost unmolested the privilege of slandering,—not only their immediate neighbours,—but almost every other nation on the globe. The people of the United States have by no means wanted their share of scandal: and, indeed, with respect to ourselves, the acrimony of malediction seems to have increased exactly in proportion as it was not deserved; for when all the whims and institutions of the mother country are imitated here, as well as we clumsy Republicans know how, there appears to be something extremely ungrateful in abusing us for not doing better. But the truth is, we do too well; and as our rivals have seen that we possess the greatest means for the acquisitions of wealth, they have attempted to make up the advantage by employing their superior literary force to misrepresent and to belie us. Here we are obliged to acknowledge our inferiority. The French are perhaps the only people who can adequately retaliate the calumny of which themselves, as well as their neighbours, have been the impotent subjects; and as peace has now given them access to England, we see they already begin to pay off the national debt of abuse which has been so long accumulating. General Pillet and the author before us have acquitted themselves well: and if the present *Alien Laws* are not construed so as to exclude their countrymen from the island, we hope many years will not elapse before Englishmen will be awoke from the dream of supposing themselves immaculate.

We must not be understood, however, to recommend a book like the one on our table as an authentic record of facts,—or to seek retaliation purely for the sake of retaliation. Our object is, we believe, a little more charitable. We are confident that neither the malicious falsehoods of general Pillet, nor the playful misrepresentations of Mr. \* \* \* are calculated to effect abroad any very extensive or permanent misconception of English institutions or of English character. The only benefit which we expect from such publications is their tendency to dissipate the misconception of Englishmen themselves relative to their own customs and institutions. If they could be disabused as well in any other way, we should certainly prefer it;—but long experience has made us very sure that they are a people who will never believe any of their own practices to be ridiculous, or cease to ridicule the practices of others, till a few authors like those abovementioned have convinced them in a practical manner, that, in the hands of a foreigner, the government, religion, and every institution, in short,

of another people, are susceptible of being distorted into ludicrous and nonsensical shapes. The thing is pretty thoroughly done in the volume before us. The author has caught the true spirit of English logic in treating the subject of English customs; and, as we are certain that none of his humorous misrepresentations can do any harm, we wish his book might be translated into our own language and put into the hands of every individual in the United Kingdom. Our author professes to have been in England only fifteen days at the end of 1815, and never to have been there before;—yet with the genuine philosophy of tourists, he draws universal conclusions from single facts, and charitably finds fault with the very best institutions, merely because they are not on the model of similar establishments in his own country. Thus, the clerk at the Alien Office thrust the pen behind his ear; therefore all English clerks have the pens behind their ears. He could get no napkin at the tavern in Dover; and he concludes, as a traveller should,—that napkins are an article unknown in England. The same logic runs through the whole book. ‘I followed her (the chamber maid, says Mr. \*\*\*) through a small, and very narrow stair-case,—*like most of the stair-cases in England,*’ &c. ‘It had undoubtedly made an agreeable diversion at tea; of which the custom-house officers (douaniers), like *all other Englishmen*, drink plentifully *every morning.*’ ‘The great part of the rich Englishmen have French cooks, &c. &c.

But the great merit of our author consists in the ingenuity with which he exalts the worst institutions in Paris at the expense of the best in London,—and in finding a thousand plausible faults in those very circumstances which the English themselves have been accustomed to think were granted on all hands to be without spot or blemish. He goes into no political discussions; and our examples must therefore be taken from subjects about which few will think it worth while to quarrel. It cannot be seriously pretended for a minute, that the streets of London, which have side-walks, are much more commodious than those of Paris, which have them not; and yet when we have read the following description of English trottoirs we see they are nothing but a perpetual annoyance to the foot-passenger; nor do we perceive in the first perturbation of our reason, that it is much better to be run against by a wheelbarrow than to be run over by a coach,—and that the hazard of getting a drop of milk upon one’s clothes is a trifle to the certainty of being spattered all over with mud.

‘Nor must you imagine that one can walk peaceably upon the famous trottoirs of which so much is said. You are aloof, it is true, from horses and from carriages; but you have not the less

need of all your attention to guard against the dangers with which you are threatened at every step, from wheelbarrows—milk-pails, the shovels and pickaxes of street-sweepers—bakers' and cooks' baskets—the materials and instruments of all professions (particularly of the masons,) but above all from the ladders of the lamp-lighters,—who, as soon as evening commences, begin to run like madmen from lamp to lamp, with the ladder on their shoulders, and at the risk of overturning every thing before them. And when the lamps are lighted, they only serve to render obscurity visible; the wicks being so small and give so little light, that they might well be compared to those insects which, in the darkness of a beautiful summer's night, display the little sparks with which nature has provided them.—But it does not suffice that you look before you—behind you—and on all sides of you: take very good care how you put down your feet. A precipice awaits you before every house. All the side-walks are hollow, and have trap-doors all along on the top. They are circular or square, and are placed in the middle of the trottoir as a door for the admission of coal. If one is unfortunately open when you pass, and you don't take care where you step, you may break your leg: but that is nothing. If the iron or wooden grate should chance to be open, you may break your neck; which *is* something. 'At least,' the reader will say, 'one may go a foot upon those side-walks?' Without doubt, when the weather is good; but, in the contrary case, they are covered with about a half of an inch of mud; which neither the cleaners of the streets, nor the owners of the neighbouring houses, ever think of clearing away;—insomuch that the men are always in boots or in gaters, and the approach of a woman is announced by the noise of the iron *patins* with which her feet are armed.'

Policies of insurance are another institution with which Englishmen have an idea that no sort of fault can be found; and yet our sojourner contrives to make it little better than a curse to the city. We translate a part of the chapter entitled *L'Incendie*.

'Fire! fire! fire!'—Such was the frightful cry which about midnight arrested me from my bed just as I was going to get into it. I threw on my gown in haste, and ran into my little salon which looked into the street; where I saw the flames issuing with violence through the windows of a neighbouring house. The proprietor of the house on the other side of the one in which I lodged,—though he had comparatively nothing to fear as he was farther off the fire,—was nevertheless very busily engaged in removing his furniture: and I could not conceive the reason of the tranquillity which reigned in our own dwelling. 'These good people are asleep,' thought I, 'or they are not acquainted with the truth that—'

*Tua res agitur paries cum proximus ardet.'*

I thought I must sound the alarm; and accordingly played one after the other the two bells with which my room was furnished. My hostess ran up immediately, and asked in the most calm and tranquil tone—‘What do you want, sir?’ ‘Why, to advertise you of the danger which threatens your house. Don’t you see the fire is in the next house?’—‘Oh! is that all! We knew that before. My husband and myself had not gone to bed. You had better pack your things in your trunk; for it is possible that the fire will be communicated to this house. It sometimes consumes three or four before they can get it under.’—‘But what means the tranquillity in which I see you? Why don’t you take yourself the good council which you offer me?’—‘Oh! I have nothing to fear. You see by the sign over the window that my house is insured. It is very old; and if it is burned, they will pay me; so I run no risk.’—‘That is very well for the house. But your furniture?’—‘Is insured too? I am in no uneasiness. I have only prepared a little packet of linen, which we shall carry out at the last moment.’—‘All London is insured then?’—‘Yes; and life too. You can get yourself insured for sixty or sixty-five years; and if you die before that age, the contracted sum will be paid to your heirs.’ At this moment the rafters of the burning house fell in, and the fire seemed to acquire a new force. ‘I hope nobody has perished!’ exclaimed I. ‘No,’ she said. ‘Do you see that large man in an over-coat, with arms crossed, leaning against the wall of the other side of the street, in front of the house which is on fire? It is the owner. I see close by his wife, his three infants, and his servant, who were the sole occupants of the house.’—‘I need not ask you whether his house is insured: his air of tranquillity convinces me of that. He reminds me of an ancient philosopher, who warmed his hands over the burning ruins of his house,—saying, it was the last service which it could render him.’—At length the fire was mastered. It is a fine thing—this insurance, thought I, in returning to my bed; ‘but it may be the cause of great mischief, by making the owners of houses less solicitous about fire, and less careful to take the proper measures to prevent it. Is it not possible, also, that villains may get their houses, their goods, and their merchandize insured,—and then set them on fire with their own hands in order to receive the stipulated sum of insurance?’—In the morning I suggested this reflection to my hostess. But she answered that, in the first place, the crime was punished with death,—(about eighteen months before a man had been hung for it;) and that, on the other hand, after having given an insurance, the company causes your house, your furniture, and your goods to be estimated, and may renew that estimation as often as they please. This answer satisfied me but imperfectly;—for the day after the valuation, the insured might cause to disappear the best part of his furniture, and goods: so that no estimation can completely prevent the rascality of which insurances are the occasions.’

Our *Fifteen Days* has often reminded us of the Sentimental Journey; and the following description of a French artist who had been reduced to poverty in London, and whom our author accidentally encountered at an eating-house, is a good deal in the manner of Sterne.

‘While they were preparing my dinner, a man who sat at the same table with me called to the boy for the purpose of paying his reckoning. The account was not long. Two pence worth of bread—two pence worth of beer, and a penny’s worth of cheese, composed the whole of his bill. He took six pence out of a little purse which appeared very light; and, after giving the boy a half of the surplus penny, returned the other half into the purse with a long-drawn and profound sigh. He was a man about five feet five inches high. His legs (nothing but spindles) were covered with a pair of black gaiters,—through the buttonings of which you might discover that a pair of stockings were not considered as an indispensable article of his toilette. His breeches, which were of the same colour, and of which it was impossible to divine the stuff,—they were so much worn,—covered two legs that were not much larger than a sheep’s: a jacket striped with blue and yellow flapped over the part of his body, in which one vainly searched for the semblance of a belly; and the whole was covered with a black garment patched at the two elbows with white thread, which had been blackened with ink in order to disguise the colour. His cheeks, entering his jaws on each side, seemed to endeavour at hiding themselves, and his front was covered with wrinkles which appeared to be rather the work of chagrin than of age. Nevertheless he carried his head high; and his brilliant and sparkling (spirituels) eyes announced a sort of fierceness. I eyed him with great attention; for his features appeared not altogether unknown to me. As chance would have it, he threw a look towards the place in which I sat; and he immediately approached me: ‘Ah! what brought you to London; and is it really you whom I see in this sumptuous hotel?’—‘Yes,’ I answered; ‘but I protest, I seek in vain to——’ ‘Recognize me? I can easily believe it. I am greatly changed from what I was three years ago, when you last saw me.—I am Croquis.’—I then recognized him,—notwithstanding the incredible metamorphosis which his whole person had undergone. Mr. Croquis was a French painter who, without being elevated to the ranks of the first artists, had nevertheless enjoyed a considerable reputation. His conduct had always been regular: I never knew him to be guilty of a fault; and I could not divine the reason of the miserable state into which he was fallen. I got him to sit near me, and invited him to partake of my dinner. ‘I have dined,’ said he, with a smile mixed with bitterness, ‘and I have no need of any thing.’ I prevailed over his scruples, however; and from the manner in which he used his knife and fork (*officia*), I perceived

that he had not eaten to appease his appetite—but to save himself from starvation.'

M. Croquis' story is then told. He had been enticed to London by the hopes of extensive patronage; had hired a convenient room in the fashionable part of the town, for the exhibition of his pictures; was visited by all the amateurs, and seemed at first to have a fair prospect of success. But it was soon overshadowed. His funds were small; and the very first picture he undertook was spoken for by a man who became bankrupt before he had finished it. The native artists, too, attacked him on all sides; and he was finally driven into a garret, where he could make no display of his art, and could but just keep himself alive, by painting a few pictures and teaching a few pupils. He had a rich uncle in France, who he knew would take every pains to meliorate his condition; and as he had some time previously made him acquainted with his necessitous case, he expected there was at that very time an answer in the post-office,—but protested that he had never inquired, because he could not get money enough to pay the postage. Mr. \*\*\* went to the office with him; found the letter; and paid the postage, in a delicate way, by only *lending* Croquis the money. It contained an invitation to France, with a *bill* of four hundred francs drawn on a London banker; and—to cut short a long story—our French artist and French traveller took the same Diligence in their departure for the continent.

We must now accompany the author into an English coffee-house.

'We entered a large room, in which my olfactories were regaled with the smell of tobacco-smoke,—which to me is not the most agreeable in the world. My eye-sight was not more agreeably struck with the appearance of fifteen or eighteen tables ranged along the walls, and covered with napkins (*c'est un meuble qui n'est pas en usage dans les auberges Anglaises. p. 11.*) extremely soiled. Every one was occupied very seriously with the business which attracted them to the place; and the word—*boy!*—pronounced now and then, was almost the only sound which could be heard in this Palace of Silence.—While the boy was preparing our coffee, I threw my eyes around upon the company. On my left was a man of the middle age; who was well enough clothed—had a very large body—with a mouth to the ears—and was tossing into his throat, one after another, enormous mouthfuls of beef, pretty much as they pitch bundles of hay into a loft.—On my left a young man, dressed in a thread-bare black coat,—whose visage was twice as long as it was broad, and who might have been taken for a skeleton in clothes, if his hands and his face had not been covered with a pale and livid skin,—was tête-à-tête with a two-penny pint of beer, out of which he now and then sipped an eco-

nomical swallow. Yes, reader, he drank out of his pint; nor should you be astonished at it; for a great many Englishmen,—I do not speak of the vulgar alone,—drink in just the same manner. And are they not right? They are in no danger of breaking a tumbler, and have no need of any body to rinse it.—In front of me three youths were seated around a bowl of punch. They had no appearance of the gayness and vivacity so natural to that age. They remained serious—taciturn—and seemed to be saying, or rather thinking,—‘Let us drink; for what can we do better!’—By the side of these an old man, whose face was covered with pimples, and whose eyes manifested a disposition to close themselves, was occupied alternately in blowing a voluminous puff of tobacco-smoke into his capacious nostrils, and in moistening his mouth with a glass of wine,—not forgetting to raise his bottle to the candle at every draught, in order to ascertain how far he had drank down the contents. Near him a man in a great coat, with a packet of papers on the table before him, and a habit of looking every instant at his watch, was soaking in his tea (into which he had poured only just milk enough to change its colour), a morsel of bread, which was as dense and *heavy* as the butter on its surface, and which, by sinking itself almost wholly into the cup, spread over the tea a stratum of grease which it was amusing to see.—Three men, who seemed to be sailors by their blue jackets and blue pantaloons, and who sat at the farthest end of the room with pipes in their mouths,—were attentively engaged in perfuming the apartment. Each one had before him a glass of gin; and whenever it was empty, they whistled to have it replenished.—At one table there was but a single person. He ate nothing and drank nothing; but his eyes turned alternately to every part of the room; while the two long ears which he carried seemed to erect themselves at every word, in order to understand it the better. I took him for one of those honest gentry whose business it is to listen at doors,—and to peep through key-holes,—and who, having seen nothing, or heard nothing, during the live-long day, and wishing nevertheless to acquire the merit of a good report,—throws himself headlong into malediction, although he has nobody to calumniate.’

English unsociability is again ridiculed in the practice of keeping the hat perpetually on the head.

‘This morning (says our author, in conversation with a Franco-English friend) I went to a bookseller’s who had already sold me many books, and of whom I wanted to make some additional purchases. A lady was in the shop,—and very certainly I did not wish him to quit her to attend on me; but he served successively six or seven persons who thrust themselves before me. At length, however, he addressed me;—after suffering me to occupy myself a half hour in reading the titles of the works on his shelves, and after he had completely disburthened himself of all other labour.

I know he saw me enter; for I saluted him very politely, and at the same time placed my hat upon the top of his desk.'—'Here we have it again! All French yet! Nothing but French! Why, English merchants proportion their attentiveness to the importance which their customers give themselves. Enter the best shop in London to buy an article of no more than sixpence value,—present yourself with the hat on your head,—with a commanding word,—and an air of consequence; they will wait upon you in an instant, and reconduct you quite to the door with a world of complaisance. An Englishman never takes off his hat when he enters a shop; nor does any body notice him when he goes into any public place. Whenever *you* enter a coffee-room or a chop-house, I observe every one turn their eyes upon you: for scarcely is your foot over the threshold before your head is uncovered. See an Englishman enter. He advances gravely, with his hat on his head; looks to the right and to the left,—nods to those whom he recognizes,—chooses himself a place,—and then takes off his hat; provided it incommodes him.'

We had intended to present our readers with extracts from some other chapters of this lively little work; but we can devote no more of our pages to matter which occupies so much room and communicates so little information. We must state in a general way, therefore, that our author goes on to laugh at every English custom and institution with which he has any thing to do. All the shops are shut up on Sunday: they have no censor for the press; the alien office is under tyrannical regulation; English eating and drinking are execrable—grog and plumb-pudding excepted; and that English liberty can be nothing but licentiousness, is manifest from the fact, that persons are permitted to skate on Serpentine river before the ice is thick enough to bear them,—whereas gendarmerie ought to be stationed on the banks in order to prevent them from skating till the water is thoroughly congealed. Our author grins, in short, at every thing English, which he sees, hears, tastes, smells, or touches; and we have often been amused to see him spying out faults in practices which are immemorial to ourselves as well as to the English, and which we have been accustomed to think were all but unblamable and immaculate. His objections are seldom profound or weighty; but they serve to blind us for a moment,—and that is all, perhaps, which the author intended.—The old propensity of Frenchmen to be trifling upon serious topics, and serious upon trifling ones, is a frequent subject of remark in the *Quinze Jours a Londres*. We shall subjoin two passages,—in one of which, as our readers will perceive, Mr. \* \* \* preaches on a caricature, and in the other, makes merry over a coffin. When he was carried to a print-shop in London,—instead of joining the laugh with his com-

rade, we find him taking great offence at the want of *design* in the caricatures before him, and marching off in the following manner about the caricatures of antiquity!

‘The ancients knew the art of caricaturing; and although we have few specimens of their success in this department, we are in possession of enough to demonstrate that they neglected no rule either of design or of execution. A painter who wished to represent the people of Athens as alternately firm and inconstant—cruel and magnanimous—humble and arrogant—unjust and equitable—found the means of conveying that truth in a picture which represented the Genius of the City scattering around her the seeds of all the vices and of all the virtues. Another painter represented Timotheus asleep, while Fortune was taking cities for him in a net. ‘What shall I do when awake?’ asked the general when the picture was shown to him.—I would also place among ancient caricatures, the picture in which a celebrated queen was represented as prostituting herself to a fisherman. Instead of punishing the painter, she made him a considerable present. These are the models which should be imitated by the caricaturists; in the place of making a speech from the mouths of their personages, ordinarily worthy of the manner in which the subject is treated. You will acknowledge that all English caricatures are distinguished by this fault. And upon the whole (our author thinks) England should be contented with wielding the Trident, and leave to Italy and France the triumphs of the pencil. At any rate he challenges England to produce ‘an author of caricatures worthy to figure by the side of his compatriot CALLOT.’

We translate the other passage from the Chapter entitled *L’Enterrement*.

‘My new friend, Mr. C., did not break his word: he came to my lodgings at precisely, ten o’clock. ‘What are you looking at so attentively?’ said he, upon seeing my eyes fixed to the window. ‘Do you not see across the street there, those two men dressed like our village beadles, in black robes, who hold in their hands a large mace covered with black cloth, the top of which somewhat resembles the butt of a musket,—who have their arms crossed, and their eyes cast down on the earth,—who make not a single motion,—and who resemble, in fine, those statues which we see in the French gardens; or the mannikins which we suspend in cherry-trees in order to frighten away the sparrows? They have been there ever since my arrival, and have not once changed their position.’—‘Some person is dead in the house; and these are the funeral officers who have come to superintend the interment. The procession is by no means brilliant. I was somewhat acquainted with the deceased. It is an old maid, who is of good family,—but who has no heirs except some distant and collateral relations. They do not wish to make a great fuss in her obsequies; and the proof of the little regard they have for her

memory, is, that they are going to bury her *already*, when it is not more than—yes, when it is not more than eight days since she died.’—‘And you call that *already*? Why she ought to have been interred at least six days ago.’—‘By no means. The general custom in England is to keep the body above ground ten, or twelve, or fifteen days after the decease; and they never think of interring it till the expiration of a week. During twenty-five years that I have lived in this country—but hold! See,—the procession is coming out of the house.’—I ran to the window. The two black statues had at length altered their position, and had placed themselves side by side in order to begin the march. A man in the same costume now issued from the house. He had placed upon his head a sort of empty basket of an oval form, which might be about three feet in length by about eighteen inches in breadth,—was entirely covered with black cloth, and recently surmounted with a tuft of white feathers, in honour of the virginity which the deceased had preserved during seventy-five years;—reminding me of the feathers with which they adorn mules in Spain. He placed himself behind the two statues, and preserved, like them, a state of perfect immobility, until the whole cavalcade was organized.’

‘The coffin now came out. It was not covered with the funereal cloth; for they wished to show the beauty of it to the whole neighbourhood. It appeared to be of great solidity, and much larger every way than our own. And it is indispensable; for I have since learned, that, in England, they do not, as in France, wrap up the head in a tight shroud,—but give you the liberty of the limbs, and place under your head a sort of pillow, in order that you may lie more at your ease.—They covered the coffin with a funereal cloth of black velvet, bordered with a white fringe; and it was carried by four persons, who had not mantles like the three first,—but were habited in a garment which evidently had once been black,—though it now approached a colour betwixt yellow and green. The friends or relations of the deceased followed next. I counted eighteen; who were all in deep mourning, and covered, both male and female, with a black envelop exactly like the hood which they put on for a masque-ball in France. Each had a pair of white gloves, and held in their hands a white pocket-handkerchief which they now and then raised to their eyes, in order to wipe away the tears which seemed to be dropping.’

Our readers must have discovered by this time, the scope of our author’s witticisms. Whatever is English, is considered as fair game; and he accordingly has a shaft for every person and thing he encounters, whether it be dead or alive. Nor must the Londoners imagine that he has yet done with them; for if his first *Fifteen Days* are well received, he promises to make them a second visit.

ART. IV.—*A Narrative of the Adventures and Sufferings of John R. Jewitt; only Survivor of the Crew of the Ship Boston, during a Captivity of nearly three years among the Savages of Nootka Sound: With an Account of the Manners, Mode of Living, and Religious Opinions of the Natives.*—Embellished with a plate, representing the ship in possession of the natives. New York. 1816. 12mo. pp. 208. Third Edition.

WE took notice of the first edition of this little work in our Number for June, 1815. Since that time it has been twice more put to press;—and it would, at first sight, appear somewhat singular that a book which is very badly written, and a great deal worse arranged, should have already circulated in the Northern States alone to the number (we are told) of about nine thousand copies. It is not recommended by those interior and exterior decorations which ordinarily get off a book of travels; for instead of an equilateral quarto, as ‘dick as all dis cheese,’ accompanied by all manner of maps and plates and annotations,—we have here only a thin parallelogram of a duodecimo, ‘embellished’ (the author thinks) with a single effort at an engraving, and blotted on the outside with two daubings, which are intended to represent the king of the Nootkians, first, in his visiting costume, and, secondly, in the act of harpooning a whale. All the interest of the volume is, therefore, derived solely from the nature of the facts which it contains. Of these we have already expressed our opinion; and have only to add, that although Jewitt has not been *had up* two or three times a day for a fortnight and cross-examined by the imposing Members of the Royal Society of London (it is no wonder that poor Adams, the sailor, wanted to get back to his own country),—we know from the simplicity and good faith which appears in the narrative itself, and from the consistency which the author has preserved in telling ourselves the story at different times, that what he has given to the world is a faithful record of the facts.

John R. Jewitt is a native of Boston, in Lincolnshire, Great Britain; and was employed as armourer on board the ship *Boston*, of Boston, in Massachusetts,—commanded by John Salter of the same place, and engaged in the skin and fur trade of the North West Coast. The captain left the Downs on the 3d of September, 1802; reached St. Catherine’s island, on the coast of Brazil, about the 1st of October; stopped long enough to recruit his stores of wood and water; passed cape Horn on the 25th of December,—after a detention of twenty-six days; and cast anchor in Friendly Cove, before the village of Nootka, on the 12th of March, 1803. Maquina, emperor of all the Noot-

kas, had so often commerced with such visitants that he understood enough of English to express himself intelligibly; and an intercourse was soon established between his own subjects and the crew of the Boston. On the 15th, the captain invited his Nootkian majesty to dine on board of the ship; and afterwards dismissed him with the present of an elegant two-barrelled gun. He dined with the captain again on the 19th; and two days afterwards reciprocated his present with nine pairs of wild ducks. Unfortunately, however, he had broken one of his locks,—and as he had never heard Sancho's aphorism about gifts, he declared in the simplicity of his Indian heart, that the gun was *peshak*—bad. The captain retorted with the lie direct; and, after adding a few nautical epithets of opprobrium, snatched the piece from Maquina and transferred it to John, our armourer. Under this lingual flagellation the king uttered nothing; but his countenance spoke daggers; and John frequently observed him rub down his wind-pipe,—in order (as he said afterwards) to suppress his heart, which kept rising and choking him. On the morning of the 22d, the natives visited the ship as usual;—in the afternoon Maquina himself was paddled along-side; and, after smiling about with unwonted affability, invited the captain to accompany him on a fishing expedition. 'You love salmon'—said he—'much in Friendly Cove:—why not go catch some?' The captain swallowed the bait.—He ordered his yawl and jolly-boat to be hoisted out; and while he was fishing in the Cove, the steward washing on shore, and our armourer at work in the steerage, Maquina gave the signal for a simultaneous insurrection. John heard an extraordinary bustle on deck; dropped his tools,—and ran up to see what was the matter: but no sooner had his head emerged from the hatch, than it was seized by one of the savages, and would have been cleft in two with an axe, if the Indian could have obtained a firm hold of his short hair. He received, as it was, a severe cut in the forehead, and fell back senseless on the cabin-floor. When he had recovered his senses, the door of the hatchway was closed; and he naturally concluded that he was only reserved to the privilege of being the last destroyed. But Maquina had ordered it otherwise. He designed from the beginning to preserve the life of the armourer,—as he knew such a workman would be of great utility in fabricating the knives, tomahawks, fish-hooks, and other implements, for which his people might have occasion. John was accordingly summoned upon deck a few moments after his recovery; and Maquina briefly told him,—in the presence of six gigantic savages, who were covered with the recent blood of his comrades, and stood ready to dye their suspended dag-

gers in his own,—that he must immediately consent to become slave for life, or share the fate of those, whose heads he saw dressed in a line upon the quarter-deck. ‘John,’ said he, ‘I speak,—you no say, No:—you say, No—daggers come.’ John did not long debate which of the two to choose. His new sovereign ordered him to kiss his royal hands and feet; and then to weigh anchor and run the Boston on shore.

The poor fellow was now landed amidst the shouts of 1500 savages. It was about eight o’clock in the afternoon:—torches were lighted up in the village; men, women, and children hooped and yelled,—drummed with sticks all over the roofs and sides of their houses,—and it seemed as if they could not possibly make noise enough to manifest their joy for the victory. The warriors, however, felt inclined to render the triumph complete by taking the life of the armourer; and were very urgent with Maquina to deliver him into their hands. But the king peremptorily refused; and, when they became too clamorous and importunate, he caught up a club and drove them all out of doors. The queen had compassion on our captive,—patted his head,—and told him to be of good cheer. The young prince, Sat-sat-so-kis, too, seemed to take an interest in his welfare,—or rather in the metal buttons on his coat; and, as Jewitt thought he might secure the favour of the father by reciprocating the attentions of the son, he took the little fellow on his knee,—cut off his buttons, and tied them about his neck. Such conduct was not lost upon Maquina; and he ordered Sat-sat-so-kis to sleep by the side of Jewitt,—lest his warriors should come and knife him in the course of the night. About 12 o’clock he was roused by the king, and told that there was still a white man on board of the ship; who had knocked down one of the natives, and should die early in the morning. At first he could not divine who the person was; but after wracking his memory for some time, he had an indistinct remembrance that Thompson, the sail-maker, was below a little before the attack, and that *his* head was not among those which he had seen on the quarter-deck. Thompson was about forty years of age,—had an old look, and might be easily made to pass for his father. In the morning, accordingly, he took the young prince by the hand and accompanied the king to the shore. When the chiefs were about to ascend the ship in order to ferrit out the refractory survivor, Jewitt took occasion to ask Maquina if he loved his son,—and Sat-sat-so-kis if he loved his father? Both answered in the affirmative:—Jewitt then rejoined, that he also loved *his* father; and begged Maquina, on his knees, to spare the life of the person on board the ship, if he turned out to be his father. The king was moved by

his intreaties; and, as very few of his own people seemed inclined to risk the contingency of being knocked down, he sent Jewitt himself to bring the prisoner on shore. His conjectures about the survivor were well-founded; and, after giving Thompson his cue, he led him ashore, and introduced him to Maquina as his father. The chiefs were clamorous for his destruction; but the practical argument of Jewitt had fixed the king in a determination to preserve his life; and both the captives were accordingly conducted to the palace, without suffering any other indignity than that of being exulted over by a set of cowardly savages.

During the 24th and 25th the natives were busied in stripping and emboweling the ship. The captain's writing-desk was of no importance to them; and accordingly Jewitt had no difficulty in appropriating that, together with a blank account-book, a Bible, a Common Prayer-Book, and a collection of drawings, which he had the good fortune to find on board. The tribes of all the country round about Nootka soon heard of the Boston's capture; and in a few days began to flock to the village with dried fish and other commodities to barter for a part of the spoil. We shall at present spare the jaws of our readers; and abstain from the transcription of the unpronounceable names by which these nations are distinguished. But we must not deny them the pleasure of reading Jewitt's account of the reception which the king gave his foreign visitants:—

‘Maquina, who was very proud of his new acquisition, was desirous of welcoming these visitors in the European manner. He accordingly ordered his men, as the canoes approached, to assemble on the beach with loaded muskets and blunderbusses, placing Thompson at the cannon which had been brought from the ship, and laid upon two long sticks of timber in front of the village, then taking a speaking trumpet in his hand, he ascended with me, the roof of his house and began drumming or beating upon the boards with a stick most violently. Nothing could be more ludicrous than the appearance of this motely group of savages collected on the shore, dressed as they were, with their ill-gotten finery, in the most fantastic manner, some in women's smocks, taken from our cargo, others in *Kotsacks*, (or cloaks) of blue, red or yellow broad-cloth, with stockings drawn over their heads, and their necks hung round with numbers of powder-horns, shot-bags, and cartouch-boxes, some of them having no less than ten muskets a-piece on their shoulders, and five or six daggers in their girdles. Diverting indeed was it to see them all squatted upon the beach, holding their muskets perpendicularly with the butt pressed upon the sand instead of against their shoulders, and in this position awaiting the order to fire. Maquina, at last, called to

them with his trumpet to fire, which they did in the most awkward and timid manner, with their muskets hard pressed upon the ground as above mentioned. At the same moment the cannon were fired by Thompson, immediately on which they threw themselves back and began to roll and tumble over the sand as if they had been shot, when suddenly springing up they began a song of triumph, and running backward and forward upon the shore with the wildest gesticulations, boasted of their exploits, and exhibited as trophies what they had taken from us.'—pp. 48-9.

As it will be impossible to sustain the thread of the narrative throughout the whole of the article, we shall here very briefly sketch the respective characters of our captives,—and then proceed to give some account of Nootkian politics, religion, and manners.—At the time of his capture Jewitt had attained his 25th year. He is one of those ingenious, tight, sagacious little fellows, who have minds,—capacious enough, to be sure, in the total,—but divided into small capacities for all sorts of employment. He could be habile and dexterous at almost any craft;—could be all things to all men;—and slip through society of any kind without difficulty or impediment. Thompson was nearly the reverse of all this; and Maquina himself had frequent occasion to observe, that Jewitt's mother must have been extremely pacific and good-natured, since his father was so full of gruffness and hostility. He was born in Philadelphia; eloped as a cabin-boy to London, when but eight years of age; got into difficulty and engaged as an apprentice to the captain of a collier; was impressed into a man of war; continued 27 years in the service,—during which he was in lord Howe's battles with the French; and had embarked on board the *Boston* in hopes of making a sailor's fortune in the fur trade. He was thus trained up in the school of adversity and of hard blows. His body of indurated clay was fired by a soul which seemed to have been stolen from the gods. He was strong and athletic,—an expert boxer,—and incapable of comprehending what ordinary mortals mean by fear or danger. Jewitt resolved to conciliate and to conquer his captors, by humouring and adopting their opinions; but Thompson acknowledged no ideas in common with the savages; he could not—and would not dissemble his feelings; and whenever the natives encroached upon his dignity, they generally experienced the weight of his fist. At first they indulged the insolence of victory by taunting and abusing their captives:—Jewitt expostulated with Maquina; and Thompson knocked the offenders down. Jewitt was determined to acquire the Nootkian language,—and endeavoured to make Thompson perceive the advantages of following the example: but he felt

scandalized by the proposal, and swore 'he hated both the Indians and their d——d lingo,—and would have nothing to do with it.' He had been so much accustomed, however, to the keeping of a log-book, that, though utterly incapable of writing or reading, he was constantly vexing his comrade to commence a diary; and when Jewitt objected that there was no ink for the purpose, he offered to puncture one of his hands every night to furnish a succedaneum. Jewitt could not think of such a resort; and his ingenuity soon enabled him to manufacture a liquid more appropriate than the express juice of Thompson's fingers. This contrast of character has often afforded us amusement in the perusal of the narrative before us; and we shall have occasion to remark many instances of its appearance in the subsequent part of our review.

Before we proceed to a particular account of the government, religion, manners, and customs of the people who must occupy the greatest part of our canvass, we shall give a brief delineation of the other tribes that were in the habit of visiting Nootka. The Klaizzarts are a tribe of about 3000 souls, situated 300 miles to the southward of Nootka. They are fairer, stronger, more affable, and more ingenuous than any other. Their faces are very broad, their noses depressed, and their heads flattened, by means of pressure on the top before the skull has become completely ossified. They pluck out all their eyebrows,—are very skilful in painting and decorating themselves,—speak the Nootkian language,—and are great hunters of the sea otter, and the *metamleth*, a species of the deer.—The Wickinnish are about 2,200. They reside at the distance of 200 miles; are less polished in all respects than the Klaizzarts; and instead of flattening the head by the imposition of a weight, they compress the sides so as to make it run up in the form of a sugar loaf. Maquina's arcomah, or queen—Yyatintlano—is a daughter of their phylarch; and the Wickinnish, accordingly, go *a-cousining* very frequently to Nootka.—The Klaoouates reside next on the north. They consist of about 1200; are very fierce, bold, and enterprising;—the people whom Maquina used to guard against with the most vigilance.—The Eshquates are next in order. They are about equally numerous with the Klaoouates; and are considered as tributary to Maquina.—The Nootkians themselves consist of only 1500 souls.—On the north the Artizzarts are the first tribe. They reside at the distance of 40 miles; consist of about 900 souls; and are in all respects the imitators, as they are the tributaries of the Nootkians.—Farther north are the Cayuquets;—a tribe more numerous, but less courageous, than the Nootkians.—Besides these there are many intervening tribes; but they all speak the

same language, and are alike in almost every other respect.—The Newchemass are an exception.—They come a great distance from the north; are much more savage than the others; speak a different language, wear a different dress, and are, in short, a different sort of people in every respect. Their beards are suffered to grow, like those of the Israelites; they are clothed, or rather covered, with wolf-skins; and take very little pains to keep themselves even decently clean. The Nootkians procure their war-songs and their paint from the Newchemass. Of the Nootkians about one-third are warriors; and if the same proportion exists among the other tribes, the whole number of fighting men on that part of the coast over which Maquina has any sway, may be estimated at about 3,500.

‘Whenever they came to visit or trade, it was their general custom to stop a few miles distant, under some bluff or rock, and rig themselves out in their best manner, by painting and dressing their heads. On their first coming on shore, they were invited to eat by the king, when they brought to him such articles as he wanted; after which the rest of the inhabitants were permitted to purchase, the strangers being careful to keep them in their canoes until sold, under strict guard, to prevent their being stolen, the disposition of these people for thieving being so great that it is necessary to keep a watchful eye upon them.

‘This was their usual mode of traffic; but whenever they wished to purchase any particular object, as for instance, a certain slave, or some other thing of which they were very desirous, the canoe that came for this purpose would lie off a little distance from the shore, and a kind of ambassador or representative of the king or chief by whom it was sent, dressed in their best manner, and with his head covered with the white down, would rise, and after making known the object of his mission, in a pompous speech, hold up specimens of such articles as he was instructed to offer in payment, mentioning the number or quantity of each; when, if the bargain was concluded, the exchange was immediately made.

‘On their visits of friendship or traffic, the chiefs alone used to sleep on shore, this was generally at the house of the king or head chief, the others passing the night on board of their canoes, which was done not only for the preservation of their property, but because they were not permitted to remain on shore, lest they might excite some disturbance, or commit depredations.’—pp. 102-3-4.

Friendly Cove lies very near the 49th degree of north latitude; and is a creek about half a mile long and three-quarters broad,—bounded on the east by the mainland, and on the west by a peninsula, which runs nine miles into the sea in a south-westerly direction; and is, upon an average, about a mile and a-half in breadth. The shores of the Cove on these two sides

are perpendicularly abrupt, and the trees are growing quite to the edge of the water. The northern boundary, on the other hand, is a fine sandy beach, which rises by a gentle acclivity to the village of Nootka. Twenty houses or huts erected in a line, and decreasing in size, from that of the phylarch in the centre, according to the rank of the *tyee* or chief,—compose the place in which our two captives were obliged to spend the greater part of three tedious years. Nootkian politics are completely typified in this architectural subordination. Maquina is not properly a king; and is himself fully aware that he can only continue his ascendancy by outdoing all the other chiefs in the abundance of his feasts, and in the expensiveness of his household. Like all feudal princes, indeed, he is nothing more than the greatest baron in the realm; and accordingly his own hut differs from that of his compeers,—not as a royal palace differs from an ordinary house,—but as a capacious mansion differs from a contracted one. His present habitation is 100 feet long, 40 broad, and 14 in height; while the extreme buildings are only about 40 feet in length, 36 in breadth, and 10 in height. Each chief has an extent of authority proportionate to the size of his house;—and thus we are presented with perhaps the only existing pyramid of society that is not a figure of speech. In the hands of a vigorous ruler, like Maquina, the phylarchical authority is necessarily absolute; and we have seen, accordingly, that, though the other chiefs are consulted in cases of importance, they always have the fear of the club before their eyes, and know very well that the only alternative is, to conduct with moderation, or to be driven out of doors. Nothing, however, can equal the reverence and affection of the Nootkians for his present majesty. Whenever his life is placed in jeopardy they become frantic and inappeasable;—insomuch that when he was detained on board of the brig *Lydia*, as the price of Jewitt and Thompson's ransom, the natives ran to and fro along the shore; lacerating their faces, tearing out their hair, and howling in the most piteous strain.—They were equally attached to his son; and, indeed, whenever *any* member of the royal family received an insult, the indignity was felt by the meanest individual in the tribe. Thompson effectually tested all their principles before he had done with them; and we suppose that, except the king, there was hardly a single adult male in Nootka whom he did not knock down once, at least, before the termination of his captivity. On one occasion he gave them an opportunity to manifest their affection for Sat-sat-so-kis. The king had lately innovated immemorial custom by illuminating his own house with lamps instead of torches; and one evening as Thompson was replenishing the oil and lighting the

wicks, a knot of young Indians, the little prince among the rest, were imprudent enough to pull his trowsers, and pinch his legs. He lost all patience; and his royal highness was, accordingly, laid as low as the meanest of his subjects. He had before committed a great many *letiones*,—but this was emphatically the *crimen majestatis*. Jewitt and Maquina were both absent; but the latter soon heard the news; and when he saw Sat-sat-so-kis prostrate as he entered the cabin, he snatched up a musket in the greatest fury, and determined to shoot the offender on the spot. His agitation rendered him so awkward, however, that he did not load the gun till Jewitt had time to attain the house. When he entered, Maquina was frothing at the mouth, and in the act of presenting the musket,—while Thompson stood in a posture of defiance, and was calling on the king to ‘shoot and be d——d.’ Nor was it till he had exhausted all his peace-making eloquence, that Jewitt could persuade the former to spare the life of his pseudo-father, or the latter to receive his life at such unworthy hands. At length, however, the king was prevailed upon to deliver up the musket;—and when the tempest of anger had subsided into the calm of reflection,—‘John (said he) *you die,—Thompson kill.*’ The storm, however, had by no means gone over. The whole tribe were so violently enraged, that Jewitt had to use all his persuasion, and Maquina to exercise all his authority, in order to prevent them from taking the life of the delinquent; who, in the mean time, seemed not to care half so much about his own existence as either the king or the armourer.

But, besides this strong attachment of his subjects, Maquina is distinguished from the other chiefs by the superior eclat of his personal decorations and accompaniments. His belts are broader, and his clothes are finer, than those of the subordinate tyees; and while the latter wear nothing more than a coarse, unornamented cap in the fashion of a sugar-loaf or truncated cone, the latter has an urn on the top of his, and a daubing in front, which was intended for a representation of whale-fishing. The whale is the *royal fish*; and wo be unto the presumptuous plebeian who dares to strike before Maquina has had a chance! The distribution of all booty is referred to the phylarch; who, of course, does not apportion to himself the smallest dividend. The division of political labour is not to be expected in such a state of society; and the prime ministry, the mastership of the ceremonies, as well as the office of jester or poet laureate, are all concentrated in the same individual; who, in the Nootkian, is called *climmer-habbee*. The great part of his duty consists in steering the king’s canoe,—in performing the feudal office of showing visitors to their appropriate seats at the royal table,—

and in enlivening the monotonous unsociability of a savage feast by all manner of antic capering and extravagant buffoonery. The present incumbent is Kinneclimmets. Maquina thinks he is a paragon of wit and cleverness; and, though Jewitt had taste enough to be disgusted with his performances, he nevertheless found it expedient to fall in with the king's humour and to laugh as heartily as the rest. His comrade, however, could not dissemble; and whenever Kinneclimmets began to go through his 'manual exercise of heels,' Thompson escaped as speedily as possible,—uttering a suppressed exclamation of 'd——d fool!' as he issued from the door. These exhibitions were generally closed with a dance by prince Sat-sat-so-kis; who, as he was a great deal younger than Kinneclimmets, most commonly played the fool with admirable flexibility and contortion.

Nor is it in civil matters alone that the king is distinguished from the other tyees. He is pontifex maximus; and always spends two or three days in sololocution and prayer, before he enters upon any enterprise of importance. On such occasions he binds around his head a fillet of red bark with a large branch of spruce on the top,—which is the Nootkian symbol of mourning and humiliation; takes the great rattle in his hand, and goes alone into the woods very early in the morning. At evening he returns with a most solemn and rueful countenance; nor durst any of the tribe attempt to invade his reverie;—though perhaps the object of all his supplications, is no more than that his god, or Quahootze, would deign to let him catch abundance of salmon, or harpoon a very great whale. For a week before going to take the latter fish,—besides the fasting and prayer of the king,—the whole tribe were to be very abstemious,—to have no commerce with their wives,—and to bathe and scrub themselves every day in the most violent manner. The ascetics themselves never lacerated their bodies with more cruelty, than do these faithful Nootkians with bushes and briars and shells of every description. But on one occasion, notwithstanding the rigorous performance of all these ceremonies, the king's harpoon broke and he caught no whale. In he came, out of all patience. Every thing and every body was to blame,—except his harpoon and himself. The whole tribe fell under his royal displeasure. He said there could be no doubt that his ill-luck was the consequence of their not scrubbing themselves effectually, or of their having held commerce with the squaws; and told them with an air betwixt indifference and desperation, that it would be in vain to think of catching whales, as long as they continued dirty and incontinent. Jewitt, however, made him a better harpoon; and the next day he entered

Friendly Cove leading in triumph a *royal fish* of unusual bulk. He was now as much pleased as he had been dissatisfied before; and all the members of the tribe who remained at home, contrived to manifest their sympathy by hooping outrageously and drumming with great violence on the sides and roofs of their houses.

Yet, notwithstanding all the abovementioned mummary of religion, the Nootkians have no rational idea of a Supreme Being; nor do they entertain any notion at all concerning a state of existence beyond the present. While Maquina was lamenting the death of Tootoosch, his brother-in-law, Jewitt undertook to console him by the assurance that the soul of the deceased had gone to happiness above:—but the king shook his infidel head; and, pointing to the earth, returned that ‘there was the end of him.’ Though their idea of deity is not so conformable as our own to the dictates of reason; it is by no means so very irrational as that of most other savage and barbarous nations. They never fall down before stocks and stones; nor are they guilty of worshipping even the likeness of any thing either in heaven or on earth. Their overruling Providence is some being who, like themselves, can have no office beyond the regulation of worldly events; and is entirely occupied in inflicting immediate punishment, or in conferring present reward upon the evil or good works of his creatures. Perhaps it is hardly possible, however, for any people to have a notion of power analogous to what they witness in sublunary things, without conceiving, at the same time, that it must reside in a being of similar configuration with some of those that are seen in the air or on the earth;—and, from an anecdote in the present volume, we are somewhat inclined to think that the Nootkians believe their Quahootze to be no other than an enormous cod-fish. On the night of the 15th of January, 1805, there was a lunar eclipse. The inhabitants sallied out universally; and began to sing and drum upon their houses in the most emphatic and violent manner. Jewitt was soon awakened;—he ran out to see what could be the matter; and, when he asked what they thought of effecting by such a noise, they said they were driving away a great cod-fish that was endeavouring to swallow the moon.

Instead of setting apart every seventh day for religious purposes, our natives devote seven days at once, about the close of every year, to the celebration of their deity. The ceremony is commenced very unaccountably. Without the least apparent forewarning, the king discharges a pistol under the ear of the prince; who, on his part, falls down as if dead, and is presently carried off, amidst the lamentations of the assem-

bled tribe, by two individuals in the disguise of wolf-skins. Men, women, and children,—all dressed in their plainest manner, with red fillets about their heads, and rueful gravity in their faces,—assemble soon afterwards at Maquina's house; where they spend the greater part of both day and night in chanting mournful psalmody to the jingle of the great rattle, and the music, or rather noise, of a rude hollow instrument, upon which the king is said very truly to *beat* time. During the seven days they eat but seldom, and extremely little,—retire very late and get up very early. It was formerly the practice to close the celebration by sacrificing a man in honour of Quahootze; but of late they have adopted the more humane custom of wafting a boy about the house by means of three bayonets thrust into the flesh on each side of his body. Some of the neighbouring tribes are then invited to the village:—a great feast is prepared; and the abstinence of a whole week is recompensed by the gluttony of a few hours.—We may observe in passing that the above ceremony could never have been seen by a transient visitor;—inasmuch as the first time of its performance our two captives were sent into the woods, with a threat of certain death if they returned before the expiration of seven days; nor would they have been permitted to witness it the following year unless Maquina had considered their long captivity as equivalent to naturalization.

The Nootkians have a few other superstitious observances which we may as well notice under this head. When they have taken a bear, he is erected in the king's house upon his hinder feet, dressed and decorated like a phylarch, and has placed before him a bountiful tray of provisions. He proves contumacious of course;—and his captors proceed, accordingly, to skin and to cook him,—the intermediate operation of dressing being in a great measure dispensed with. A royal feast is given:—and one bear will supply the whole tribe; as the penalty of tasting the flesh is rigorous abstinence from fish,—their common food,—during the two subsequent months. What is typified in the first part of the ceremony, we cannot undertake to determine; unless, indeed, we suppose it to be the Nootkian method of demonstrating that man is the lord of creation. The *vindictive* part of the regulation may admit of a more plausible explanation; since it would be impossible for one bear to feast the whole nation, unless the impendence of some penalty should be sufficient to make the greatest part contented with merely seeing the remainder eat.—The animal is caught in rude traps located on the banks of rivers, near the shallow places where he is accustomed to watch and take salmon:—and the Nootkians pretend, that the fish would dis-

continue coming, if those who had eaten the meat were for two months afterwards permitted to taste of fish.

They have an equally ridiculous superstition about the birth of twins. The parents live in a hut built expressly for themselves and isolated from those of the village. They abstain during two years from all kinds of meat and of fresh fish; appear uniformly thoughtful and gloomy; have the red fillet of humiliation about their heads,—and hold no communication with the other inhabitants. The husband is never invited to any feasts, except such as are made up of dried provision; at which, however,—let his ordinary rank be what it will,—he is always treated with the same respect as a tyee. It is his daily practice to retire into the woods with a chief's rattle in his hand, for the purpose, Maquina said, of praying to Quahootze that he would fill their waters with fish. The Nootkians consider him as a sacred character; and he is always employed to sing and pray and incantate over their sick. It would be idle to think of tracing the origin of such notions. Perhaps, however, the birth of two children at once and from the same parent is looked upon as a dangerous increase of population; and the rigorous abstinence of the father and mother for two years may be intended to anticipate the loss of provision which must be occasioned by the future consumption of their children. But, at all events, we see that the Nootkian superstitions have every one some reference to the capture of fish;—and as they eat very little of any other food, and as all their religion is merely sublunary, we may conclude generally, that their institutions of this sort had a common foundation in the desire of increasing, in some way or other, their stock of provisions.

The institution of marriage in this, as in most other savage nations, is extremely simple. Polygamy is allowed,—and Maquina himself has seven wives; but in the acquisition of a helpmate there are no long courtships or tedious nuptials. Society has advanced far in the progress of civilization, when men and women begin to be considered as something more than bare merchandise,—and we find that, during the whole of the savage and barbarous periods, not only is marriage a matter of bargain and sale,—but an appropriate price or manbote is affixed to every individual in the community. A wife among the Nootkians is the mere creature of parental negotiation. After our captives had been two years in their society the chiefs came to a determination, that Jewitt should be married (they knew better than to think of savagizing Thompson); and accordingly the king made it known to the half-naturalized armourer, that he must consent to take a wife, or himself and his comrade be put to immediate death. ‘Reduced to this sad extremity (says

the poor fellow), with death on one side and matrimony on the other, I thought proper to choose what appeared to me the least of two evils, and consent to be married, on condition, that as I did not fancy any of the Nootka women, I should be permitted to make my choice of one from some other tribe.' There was no objection to this proviso; and the next day, accordingly, the king started in two canoes, manned with fifty men and loaded with cloth, blankets, and skins, in order to purchase for his fastidious captive an Aitizzartan spouse. Their arrival at the village created a general alarm; but the cause was soon explained; and a messenger dressed in his best apparel was sent to invite Maquina to land and feast at the king's house. Each visitor was shown to his appointed place; and, when all were seated, his Nootkian majesty asked Jewitt if he saw any female who suited his fancy. He answered in the affirmative; and pointed out Eu-stoch-ee-exqua, the daughter of Upquesta, the phylarch. The presents were then delivered amidst the shouts of 'klack-ko-tyee'—'thank ye chief;' and when the assembly had resumed their seats, Maquina rose, and, in a speech of about thirty minutes, endeavoured to convince the Aitizzartan chief that he had by no means made an unprofitable bargain. The general topics of his argument were,—that Jewitt was as good as any of them,—only that he was white; that he had already performed, and would continue to perform, the most important services in the administration of the Nootkian government; that he made the best of fish-hooks, daggers, and harpoons; and that, in short, without the co-operation of John, his neighbours would become intrusive, his subjects rebellious, the whales untractable, and the salmon shy. He hoped, therefore, his brother tyee would see the manifold advantages which must accrue to the *Aitizzarts* by a consummation of the proposed union. Upquesta followed; and, in a speech of equal length, set off the accomplishments and virtues of his daughter. He could not, at first, even think of parting with his beloved Eu-stoch-ee-exqua; but he began to grow a little more concessive towards the end; and finally he did not much care if, upon promise of kind treatment, the suitor should make her his bride. When the chief began to use expressions of consent, Kinniclimmets vociferated, 'wocash! wocash!'—'good! good!' and continued to spin on his heel and exhibit his usual buffoonery to the close of the ceremony.

Whatever is purchased will, of course, be considered as property; and accordingly the wife of a Nootkian is unconditionally at the disposal of her husband. It must often happen, too, that a woman is sold to one person, while her affections are fixed upon another; but, among the Nootkians, no very serious con-

sequences follow from such a state of things; for as the least deformity in a female is esteemed an insuperable objection to her marriage, whenever a wife is unfaithful, or stubborn, the husband inflicts on her some mark of disfiguration, and sends her home to her parents. A little before the end of our captives' second year, Yealthlower, the king's elder brother, had purchased a new wife; and upon her refusal of sleeping with him, he one day called in John and had his teeth filed sharp; concealing the object he had in view, till the operation was over,—and then assuring the operator, that, if his wife persisted in refusing to sleep with him, he should certainly bite off her nose and order her home. Jewitt endeavoured to dissuade him from so savage a resolution; but he was flint and adamant to persuasion; and the next morning the face of his wife exhibited too unequivocal a proof of the fidelity with which her husband had adhered to his promise. Yet we are told, that this same husband was an amiable, good-natured sort of a man,—and that he went about the deformation of his wife,—not as a matter of revenge merely,—but as a thing of course and of duty. Where wives are liable to be thus rendered outcasts for life at the pleasure of their husbands, it must seldom happen that they prove unfaithful, or contumacious; and Jewitt tells us, that Yealthlower's spouse was the only one, who, during the three years of his captivity, had her nose bit off, or her person disfigured in any other way.

To one another the Nootkians are affable and neighbourly; and indeed the juxta-position of their houses, as well as the infrequency with which they are separated from each other in the chase, or in any other such occupation, must necessarily tend to rub off the corners of the savage character, and to make them capable of lying by the side of each other without much opposition or disagreement. Nor must it be concluded from what we said about their religion, that they are altogether without a sense of right and wrong. Maquina felt a perpetual consciousness of guilt for his capture of the Boston;—and more than a year after the event, when he one day saw Jewitt writing in his journal, he snatched the book out of his hand and threatened to throw it in the fire the very next time he caught him in such business. Jewitt expostulated, by assuring the king that he was only keeping a memorandum of daily occurrences; but Maquina shook his head, and added, that he was unquestionably writing an account of the manner in which the ship was taken. But the capture had the most powerful effect upon Tootoosch, the first warrior of the tribe. It was always present to his mind; and six months after the affair, while in the enjoyment of perfect health, he was seized with a fit of delirium, and said

he saw Hall and Wood, two of the crew whom he despatched with his own hand, perpetually before his eyes. When food was offered him, he reached forth his hand to take it,—but suddenly recoiled upon himself, and said Hall and Wood would kill him if he touched it. Maquina was greatly troubled; and thanked himself repeatedly that he had not imbrued his hands in the blood of either of the crew: for Nootkian logic would not carry him to the conclusion that the blood of the whole was upon his own head. He was at first inclined to believe that his two captives were the causes of Tootoosch's delirium; and he accordingly asked the warrior, in their presence, whether it was not John and Thompson, instead of Hall and Wood, who were perpetually before his eyes? 'Wik (no, said he), John klushish—Thompson klushish'—John good—Thompson good: and, patting the former on the shoulder, invited him to eat. Maquina then endeavoured to laugh him out of his madness; but when he saw his jokes pass off without effect, he grew extremely serious, and asked Jewitt, what was the manner in which such disorders were cured among the people with whom he formerly lived? Imprisonment and violent whipping, answered Jewitt:—and after considerable deliberation, the king said he believed Tootoosch must submit to the specific. Thompson was, of course, appointed to administer it; and, as nothing could please him better than to flog an Indian with impunity, he provided himself with several stout whips of beach, and stood ready to wear them all out on the back of Tootoosch, while they were tying him to receive the chastisement. The poor tyee kicked, and bit, and foamed in the most violent manner; but Thompson only whipped him the harder; and, for aught we know, would have ended his life, if Maquina had not interfered, and protested that he had rather see the patient die of the disease than be killed by the remedy.—Tootoosch had lost a son and a daughter a short time before the advent of his delirium,—and he died himself not many months afterwards.

Like all other savages, the Nootkians are very hostile to their friends, and very amiable to their enemies. In the delivery of a present, for example, they look fiercely and menacingly in the face of the recipient, and then throw the article towards him with an air of stern defiance:—while, on the contrary, when they are about to attack an individual, or a tribe, their faces are perpetually in smiles, and, to appearance, their whole deportment is ominous of any thing but war. They make no proclamations,—send no tomahawks, or other hostile weapons, as the signals of war to the people against whom they intend to go:—but keep the time and object of the expedition a profound

secret; and spend three or four preparatory weeks in procuring daggers, and chetoolths or war-clubs,—and in scrubbing themselves daily with bushes and briars; exclaiming, all the time, ‘Wocash Quahootze! teechemme ah welth, wik etish tau-ilth—kar-sab-matemas—wik-sish to hauk matemias—i-ya-ish kah-shittle—as-smootish warcih matemias’—Great God! let me live—not be sick—find the enemy—not fear him—find him asleep—kill a great many of him. The Aycharts, a tribe about fifty miles to the south, had given Maquina some cause of offence; and in July of the second year of the captivity, he told Jewitt that he was going to war, and wanted a supply of daggers. When all was ready, nearly the whole five hundred warriors embarked in about forty canoes, and at midnight came within view of the fated village. Jewitt and Thompson were in the expedition, and had armed themselves with pistols and cutlasses. The former ‘wished, if possible, not to stain his hands with the blood of any fellow-creature;’ while the latter would willingly have killed, not only all the Aycharts,—but all the Nootkians besides. Maquina would not suffer his impatient warriors to land, till the day was breaking; for, said he, that is the time when sleep is the soundest. At dawn, accordingly, they disembarked; and while the savages skulked along to enter the village unperceived, our two captives were stationed at convenient places for the interception of such as should be making their escape. The work of death was begun by Maquina’s driving his hatchet into the unconscious head of the phylarch,—and was ended in the complete extermination of the Aychartan nation. Jewitt and Thompson conducted as their characters would lead us to expect. The latter killed ‘seven stout fellows,’—the former made prisoners of four. And both had their appropriate reward; for while Thompson received the title of Chehielsumahar, who was the Nootkian Roustum, or Robinhood,—Jewitt enabled both himself and his comrade to live more comfortably than before, by acquiring, according to the laws of war, the absolute property of his four captives.

War is, indeed, a prolific source of slavery among the savages on the North West Coast. Prisoners are invariably reduced to the most abject servitude; and Jewitt and Thompson were only excepted from the common lot, because they were much more valuable than the ordinary sort of captives. Nearly half of the inhabitants of Maquina’s house were slaves:—slaves do all the drudgery of the tribe; and although their masters and themselves both eat at the same time, and of the same food, the two orders are too effectually kept asunder in every other particular. When a slave dies, for example, his corpse is dragged out

of doors, and left to return to dust upon the surface of the earth; whereas the death of a freeman is a subject of general sorrow:—his body is inclosed in a decent coffin and sepulchred with appropriate ceremonials. The death of a chief or warrior makes still more noise. When Tootoosch died the whole village yelled and cried for three hours. His corpse was laid out upon a plank,—his head encircled with the red fillet; and, after lying in this situation a considerable time, his remains were deposited in a box, along with the most valuable articles of his property, and carried to the grave in the night, accompanied by his family with their hair cut short, and followed up by almost all the members of the tribe. The procession returned to Maquina's house; where the blankets and other parts of the chief's wardrobe were committed to the flames by a priest appointed for the purpose,—and the whole celebration was closed with a caper from Kinneclimmets and a dance from Sat-sat-so-kis.—But it is during their lives that the slaves are distinguished from the freemen in the most ignominious manner. A dead body can receive very little injury from ill-treatment:—but, besides, being neglected after death, the female slaves are gratuitously prostituted, while living, to the brutal appetites of every individual in the tribe. In the higher walks of life, however, the virtue of chastity is nowhere more highly prized; and the reports of navigators respecting the prevalence of indiscriminate prostitution, have been entirely founded in the mistake of supposing, that the wretches brought on board and submitted to the crews of their ships, were the wives and daughters of the real Nootkians.

There is, also, another custom among these savages, which must invariably deceive a transient visitor. The Nootkian, as well as all the other tribes on the coast, have, like ourselves, a Sunday and an every day dress,—one dress which they wear among themselves, and another in which they see strangers. The ordinary garment is a cloke, or *katsack*, fabricated of bark; which, while it entirely covers the body, is contrived to leave both arms at full liberty,—that of the men by being tied under the one, and diagonally over the other,—and that of the women by being secured under the chin, and perforated on each side. As the 'cloke and cincture' of the common people is manufactured of coarse materials, and rather loosely put together, they 'keep out the tempest' by daubing it over with red paint. But the fine texture of those which are worn by the chiefs renders such a precaution unnecessary; and they are, accordingly, left in their native yellowish colour,—except where the owners have attempted to ornament them with representations of human heads, of fish, and of various other objects. The cincture, or

girdle, is generally of the same cloth: and,—besides the service of securing the mantle about the body,—it is a convenient sheath for knives and daggers. In winter they wear an additional garment of the same materials, which very much resembles the cape of a modern over-coat, when separated from the body.—The extraordinary mantles are made either of sea-otter skin, or of what the Nootkians call *matmelth*, the skin of an animal which Jewitt conjectures to be of the deer kind. It is prepared in very much the same way as that of the deer among ourselves; and the garment made out of it is never put on, except in going on board a foreign ship, or in visiting some neighbouring tribe.—Thompson,—out of sheer roguery, we suppose,—sewed together a number of very gay vest-patterns,—bordered them with a deep stripe of sea-otter skin,—strung around the bottom five or six rows of metal buttons,—and presented it to the king as a royal robe. Nothing could have pleased Maquina more. He put the thing on immediately; and went strutting about the room,—looking first down one side, and then down the other,—and exclaiming in the pride of his heart,—Klew sish katsuck;—wik cum atack Nootka!—Very fine garment;—Nootka can't make him!

There is still another particular of dress which would lead strangers into error respecting the common appearance of the Nootkians. Upon any extraordinary occasion,—and the arrival of a foreign ship is considered as such,—they bind their hair with a green bow on the top of their heads, and then shake over it the white down of a kind of eagle which abounds on the coast. The bow itself is daubed with turpentine and beset with a variety of feathers:—And they are so particular in this self-tarring and feathering, that after a good hour's labour, they will frequently demolish the whole, and begin the operation anew. They are equally scrupulous in painting themselves:—and if the squares with which they chequer their faces are too large or too small, or are not precisely equilateral, they erase them altogether, and lay on a new set. The men generally finish one side of their faces with black paint, and the other with red; but the women go no farther than to draw two black half moons over the eyes, and two red stripes from the corners of the mouth to the roots of their ears. The women dress their hair, too, in quite a different manner from that of the men; inasmuch, as instead of collecting it into one bunch on the top, they let it fall in two plats on each side of the head. They are tied at the bottoms, and are kept smooth by a suffusion of whale-oil. In all these things, however, the Nootkians, like ourselves, consult each his own fancy. They sometimes have on their faces a sort of *raised-work*; which is made by first spreading

over its surface a pretty thick stratum of bears' grease, and then ploughing with a stick the requisite number of horizontal furrows.

Their other personal decorations consist of necklaces, bracelets, and pendulums for the nose and the ears. They have a species of shell called *Ifwaw*, which is procured with great trouble from the reefs and sunken rocks along the coast, and which constitutes their only circulating medium, as well as their most costly ornaments. It is of a dazzling whiteness,—hollow, tapering, very smooth,—three inches in length, and about three-eighths of an inch in circumference. The chiefs wear necklaces of ifwaw; and hang single shells upon the periphery of the ear, or in the gristle of the nose. But the common nose-jewel is a slip of copper, or of some other convenient material, which is suspended from the cartilage by means of a wire or string, and sometimes projects eight or nine inches on each side of the face. As the commonality generally have them of wood, they can, without much expense, make their own *jewels*, as long as they please.—‘These sprit-sail-yard fellows, as my mess-mate used to call them, when rigged out in this manner, made quite a strange show, and it was his delight whenever he saw one of them coming towards us with an air of consequence proportioned to the length of his stick, to put up his hand suddenly as he was passing him, so as to strike the stick, in order, as he said, to brace him up sharp to the wind; this used to make them very angry, but nothing was more remote from Thompson’s ideas than the wish to cultivate their favour.’

Nootkian architecture is extremely simple. Six crotches are first erected,—one at each corner, and two at the gable ends of the contemplated edifice; next a very heavy pole is laid upon those in the middle and two lighter ones upon each pair on the sides: and the whole is then covered with planks split out of some fissile wood: τότε γίνεταί πολλὰ ἄξιον κτῆμα—οἰκία. But it can hardly be said to be πολλὰ ἄξιον to the Nootkians; for, with a notable regard to the real utility of houses and clothes, whenever there is any thing of a violent storm,—instead of taking shelter under the roof,—they strip, to a man, and get on the top, in order to keep the planks from being blown off. As a recompense for this inconvenience, however, their houses serve all the purposes of a bass-drum,—when any extraordinary occasion calls for a louder noise than can be made upon the smaller boxes, which constitute their common musical instruments. The inside is as plain as the exterior,—except that the posts and ridge-poles are carved into bas-relievos, which were intended to represent the heads of human beings. There is but a single aperture, which is most commonly at one of the ends;

and the smoke must accordingly go out at the same door with the inhabitants. Through the centre of the floor, which is nothing but earth, there runs a longitudinal hall; on each side of which are arranged the apartments of the several inhabitant families,—beginning with that of the chief (every house has *one*,) and proceeding alternately with those of the patriarchs, according to their respective ranks. Each family has its fire; but their only furniture consists of a tub to cook in, and a tray to eat out of. When a meal is prepared, they take their places around the common dish, in a squat, taylor-like posture; and, as they eat but once in a day, each gormandizes as much as he can; though we read of none in Maquina's sty who ever became so greedy as to get into the trough. The king here, as in some other countries is considered as 'the fountain of honour;' and it is deemed a great mark of favour (about as good as a pension) to receive a morsel from the royal tray.—The great excellence of a Nootkian house, consists in its portability. About the first of September the whole tribe break up their settlement, and depart for Tashees, a village about thirty miles up the Sound, where they catch their yearly supply of salmon. Here they remain nearly four months; and then remove to Cooptee, another station about half the way betwixt Nootka and Tashees,—where they take their annual supply of herring. In each of these three places they have the crotches and ridge poles of a village; so that when they arrive at either they have nothing to do but to cover them with their portable planks.

Our readers will have already perceived that the chief portion of their food consists of fish. Through the valley of Tashees there runs a river twenty rods wide by about twelve feet deep, which is so abundant in salmon that Jewitt has seen no less than seven hundred taken in fifteen minutes. They are driven into a conical basket about twenty feet in length, four in diameter at one end, and about as many inches at the other. Their curation is consigned to the women; who cut off the heads and tails, extract the spine, and hang them in their houses to dry. Cooptee, where the herring are caught, is situated at the mouth of the same river which runs past Tashees. The fishers are provided with a slip of some hard wood about seven feet long, two inches broad, by a half of an inch thick, and beset on one side with sharp whalebone teeth,—take their stations in the prow, and when they encounter a shoal of herring, bring down their instrument with both hands,—invert it dexterously,—and turn the captives into the canoe. With a little economy these Nootkians might live around the whole year upon the salmon and herring which they catch at Tashees and Cooptee: but

the unthinking improvidents consume, or rather waste, their provision nearly as fast as they procure it. While they remain at the two villages just mentioned they do nothing but fish, and feast. They cook in two ways:—first, by immersing heated stones into a tub of water which contains their food,—and secondly, by placing it between strata of green leaves which are laid upon a bed of such stones. They have no seasoning; and so great, indeed, is their aversion to salt, that, when Maquina once detected Jewitt boiling away sea water, he snatched up the kettle and turned out its contents,—warning his captive, at the same time, that he must never be caught in such a business again. Whatever they eat, however,—whether it be fish, or flesh, or vegetable food,—is always accompanied with a profusion of train-oil. That the astringent qualities of salt may, in the long-run, prove injurious to the system, is very possible; that the loosening and digestive effects of oil, on the other hand, must tend to keep it sound and in order, is very certain; and that the unexampled healthiness of the Nootkians, therefore, (only five natural deaths occurred during Jewitt's three years' residence among them) may, in a great measure, be attributed to their abstinence from the former, and the free use of the latter, is, we think, abundantly probable. Colic is almost the only disease which ever afflicts them,—and they cure that easy enough by merely rubbing the body.

The language of the Nootkians partakes of the simplicity which pervades every thing about them. If we can judge from the specimens given us in the Narrative, or if we may credit the positive testimony of the narrator himself, it consists of but two parts of speech,—of the noun and the verb; or, in other words, of those signs only which stand for the two great divisions of terrestrial phenomena,—to wit, objects, and events. It would, at the first view, seem almost impossible that thought should be communicated through these two symbols only; yet it is a fact, that hardly any written or printed sentence in our own language will become unintelligible by the erasure of every word except the nouns and the verbs; while in our colloquial language, on the other hand, we very frequently use nothing but the nouns, and supply the verbs by means of gesticulation. In expressions which are anywise complicated, we hardly think the adjective could be dispensed with; and yet we greatly doubt whether the Nootkians have a part of speech which is simply and purely attributive. The abstract word—*goodness*—is perhaps unknown to men in a state of savagism; and we suspect our natives have never gone further in abstraction than to institute some single substantive which comprehends what we should express by a substantive and an adjective. Thus we ap-

prehend that by the word *wocash* they signify what in English would be—*good thing*. Our conjecture derives some corroboration, too, from the manner in which they compound words for the expression of what in our own language would be *male child* and *female child*. The words *chickup*, *klootzmah*, and *tanassis* respectively signify, man, woman, and child; while the word which stands for the latter, united to those which signify the two former,—that is, *tanassis-chickup*, and *tanassis-klootzmah*,—constitute respectively the expressions for *son* and *daughter*, or man-child and woman-child.—Pronouns are not so indispensable as adjectives; and if we have conjectured rightly about the want of the latter, there will be no difficulty in believing the non-existence of the former. Accordingly we see, in the expression quoted on p. 157, for example, that, although we have substituted the pronoun in the translation, the noun is uniformly employed in the original. Literally translated the sentence would be—‘find the enemy—not fear the enemy—find the enemy asleep;’ the Nootkian word *matemas* being repeated in all the three clauses of the original passage. Perhaps, indeed, it is the nature of language, that, while in a state of rudeness, all the labour of elocution is performed by one or two words; and that, as civilization advances, the general division of labour is even extended to the parts of speech. There is something in the idea which, we confess, has the appearance of refinement; yet it is the general process of nature,—as in producing a flower, for example,—first ‘to throw out altogether, and at once (says lord Bacon), the rudiments of all the parts in one body;’ and afterwards, we may add, to ramify the several parts into their appropriate functions and positions. In the verbs of all languages, it is impossible, we suppose, to detect the latent rudiments of a pronoun; but we think it can be done in the Greek, Latin, Spanish, and perhaps some others. *ΤΥΠΤΟΜΕΝ*, for example, seems to be compounded of *ΤΥΠΤΩ* and *ΗΜΕΙΣ*;—*amamus* is still more probably a union of *amo* with *nos*;—and we are very sure that *habemos* is compounded of *haber* and *nos*. The other subordinate words of a language seem to be absolutely creatures of civilization; and yet we presume they are, to a great extent, derived from some other words.

Such are the government, religion, manners, customs, and language of the people, among whom our captives were obliged to spend nearly three years of their lives. We cannot find space enough to tell our readers all the hardships they underwent from the frequent scarcity of food,—from the tasks which their master set them,—and from the insults which they were sure of receiving from the tribe whenever the phylarch

was away. Once in each week, however, they found rest. Both retired on Sunday to the borders of a pond not far from the village;—Jewitt to approach his Maker,—and Thompson to get away from the savages. Jewitt repeatedly wrote letters which the chiefs of neighbouring tribes promised, out of envy to Maquina, they would deliver to the captain of the first ship which might come on the coast; but nineteen were miscarried, or rather not carried at all. The twentieth reached the commander of the brig *Lydia*, from Boston; and the exclamation of ‘Weena—weena—mamethlee’—‘Strangers! strangers! white men!’ soon after announced her appearance off Nootka. No words could have sounded more agreeably in the ears of our captives; and yet, lest any manifestation of joy should induce the natives to despatch them, Jewitt received the information with great indifference and told his comrade that they had better continue at work. Maquina was surprised at such conduct; and exclaimed, ‘What! John, you no glad go aboard!’ He wanted himself to go aboard, in order to procure such articles as his tribe stood in need of; and had come to ask Jewitt if he thought the enterprise would be perfectly safe. ‘Certainly,’ answered the honest armourer: ‘you have generally received good treatment at the hands of all other white men; and why should you imagine there is danger in visiting those who are on board of this ship?’—The king, accordingly, determined to go,—provided John would write him a letter of recommendation. It ran as follows:—

‘TO CAPTAIN ———, OF THE BRIG ———.

‘*Nootka, July 19, 1805.*

‘SIR—The bearer of this letter is the Indian king by the name of Maquina. He was the instigator of the capture of the ship *Boston*, of Boston, in North America, John Salter captain, and of the murder of twenty-five men of her crew, the two only survivors being now on shore; wherefore I hope you will take care to confine him according to his merits, putting in your dead-lights, and keeping so good a watch over him, that he cannot escape from you. By so doing we shall be able to obtain our release in the course of a few hours.

‘JOHN R. JEWITT, *Armourer of the Boston,*  
for himself and

‘JOHN THOMPSON, *Sailmaker of said ship.*’

When it was finished Maquina placed his finger upon the signature, and, searching our armourer’s countenance with an eye which seemed to penetrate him to the bottom,—‘John (said he) you no lie?’ John’s face was fortunately painted,—so that no signs of guilt could be seen in a change of colour; and when

he answered the question with a pretty confident negative, the king was so firmly persuaded of his fidelity that he would listen to no advice from the chiefs or other members of the tribe,—but went on hastening the preparations for the visit, and only repeating amidst the expostulations and intreaties of his despairing subjects—‘John no lie—John no lie.’ But John did lie; and when the king delivered his letter, he was put immediately in irons. The fact was soon communicated to his people; who were almost crazed with the information, and threatened to cut Jewitt into pieces not bigger than his thumb, if he did not take the proper steps for the rescue of their king. But he knew they would never lay hands upon him, so long as Maquina was at his disposal; and he accordingly made them promise to deliver up himself and his comrade before he would consent to the liberation of the king. The exchange was finally effected; though not without considerable difficulty,—for the natives contrived every possible means to get possession of Maquina, and yet retain their captives. The Lydia proceeded to the north; returned by Nootka; traded again with that tribe; went to China, and finally arrived safely at Boston. Thompson died at Havannah not long after her arrival; and Jewitt is now distributing his Narrative through the United States.

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ART. V.—*Conjectures respecting the Original Formation of the Arabic Digits, 1, 2, 3, 4, 5, 6, 7, 8, 9, 0. Communicated by John Disney, Esq.—From the Journal of Science and the Arts.*

**I**N the various researches of literature, the forms even of letters have not been considered as unworthy of attention; and the investigation has, in some instances, tended to explain and facilitate their use in an eminent degree. Of this we have several instances particularly in regard to the roman letters used as numerals, in the valuable Cyclopædia now publishing by Dr. Rees, from which I shall take two or three examples, sufficient to elucidate what I mean.—D. a numeral for 500, because *half* of the gothic *m*. M. the initial of Mille, 1000. L. a numeral for 50, because it is half E., the ancient C., which stood for 100, the initial of Centum.\* And so are explained other roman numerals. From having observed these it occurred to me, that it might not be difficult to find out how the Arabic numerals, or digits (as they are called), came by their present shapes; 1, 2, 3, 4, 5, 6, 7, 8, 9, 0. The convenience and utility of these signs in the operations of arithmetic and science need no comment; but one seems quite at a loss to

\* See the two letters D. and L.

know how calculations of any extent could be carried on by roman numerals. Each figure was a sum, 4 was IV. i. e.  $5 - 1$ , and so placed, that one can as easily suppose it to be six; for there is no reason why the right hand figure may not be added to the left hand, as well as the left hand subtracted from it: one instance more; to express 29, the sum is both addition and subtraction, XXIX. i. e.  $10 + 10 + 10 - 1$ . I only notice this, as showing, that Arabic figures deserve at least as much attention as the roman. In attempting to develop these several forms, I think I have succeeded in eight; the other two, 7 and 9, have hitherto defied all my efforts; perhaps some one else, to whom the subject may be amusing, may succeed better.

I must in the outset observe, that I found my whole conjecture upon two hypotheses; the first of which I have borrowed from the editors of the new Cyclopædia, viz. what they call the *roundness* of letters, arising from more rapid writing, as they instance in D, which, they say, 'is no other than the Greek Δ rounded a little by making it at two strokes.' This *rounding* I have availed myself of in the following figures, as will be seen: the second I have assumed myself, and is this; that while the Romans made every figure representing unity perpendicular, as I. II. &c. the inventors of the Arabic figures varied from this, by making it both ways; perpendicular, as 1, and horizontal, as =, in *two*, and ≡, in *three*; and all higher compounds either way. I shall now proceed to take each figure founded on these data in its turn.

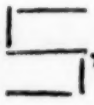




1, requires no more than has been already stated.

2, was formed =, which written quickly, became Z: and, by the *rounding* attendant upon hurry in writing, becomes further changed into 2.




3, in like manner was formed of ≡, written quickly, and rounded into 3, which still makes three distinct points to the left hand.

4, was, I suppose, a square □, i. e. = with two perpendiculars || added, one at each end, which when written quickly, is most easily done by taking the two opposite angles at one stroke each, thus, ⊥, as every one knows who has ever written geometrical problems; and these, by careless uniting, soon cross each other ⊥; and this makes our present 4, at first actually a four-sided figure.

5, is as easily formed from 3; thus ≡, which, with two (perpendicularly) added, is soon made into ≡; and that hurried, and consequently rounded, is now 5.

6. Six formed from five , by adding one to the lowest left-hand point, ; or it may be  (four), with the two lines added angle-wise at the top , and  easily rounds itself into 6.

7, has hitherto foiled me.

8, is very obviously two s, thus  joined together make , and quickened into 8.

9, like 7, must be left to some more happy conjecturer.

0, needs very little explanation: for being a circle, it has no defined sides sufficiently distinct to represent *any* number, and by its uniformity, was probably taken for none.

As we are informed that the Arabians were indebted to the Greeks for much of their science, more especially in the branch of mathematics, I would submit to the ingenious author of the third Article in the last Number, whether the Greek numerals will not supply him with the origin of the figures 7 and 9.

The Greeks represented 7 by ζ' or ζ', and 9 by θ'. It is singular that these are the only instances, in which any similarity can be traced between the Greek and Arabic digits. From which circumstance, it might be inferred, that the Arabians substituted in both cases, the Greek figures for their own, which were, perhaps, some awkward compounds of inferior numbers on the plan proposed in the article referred to.

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ART. VI.—*Albyn's Anthology; or a Select Collection of the Melodies and Vocal Poetry, peculiar to Scotland and the Isles, hitherto unpublished.* Collected and arranged by Alexander Campbell.—The modern Scotch and English verses, adapted to the Highland, Hebridean, and Lowland Melodies, written by Walter Scott, Esq. and other Living Poets of the first Eminence. Vol. I. Edinburgh. 1816. 4to. pp. 100.

NOTHING can be of more assistance to the Reviewer than such a communicative title-page;—and we have only to add to Mr. Campbell's information, that the work before us is an attempt to secure in some permanent form, before it be too late, those plaintive and pathetic tunes, which generally go under the denomination of *Scotch Airs*. The present volume is the result of no small labour; as the music it contains has been collected by the Editor in a tedious progress through Scotland and the Isles. Mr. Campbell is by no means the first gentleman

who has undertaken the collection of Scotch Songs;—and, as another example of the labour which his book has cost, we mention a preface of nine close printed pages, in which a great deal of musical *science* is displayed, together with a thorough knowledge of every thing relating to minstrelsy, highland or lowland, as well as of every former attempt to embody it in a volume. The musical Nomenclature is not very extensive; the chief heads of the Classification being the *Dorian mode*, and the *enharmonic*, and *diatonic* scales. Mr. Campbell attaches great importance to all these things; and thinks it is going to be a question which will divide the learned world—‘Whether the melodies of the Scoto-Gael, and of the Scoto-Saxons, differ widely in point of structure, or cast of character?’ The point is discussed with all due gravity; and ‘the general conclusion is, that the tunes of the Scoto-Gael, and of the Scoto-Saxons, have the same origin with the melodies of our neighbours the Irish and Welsh, and, in all probability, those still extant among our Scandinavian neighbours—nay, of the millions that inhabit the shores of the Baltic, and even the borders of the Caspian sea,’—who are Mr. Campbell’s ‘neighbours,’ too, we suppose.

This important preliminary fact being finally settled, our Editor proceeds, with the same perpetual impression of the dignity and importance of the subject, to detail at length the several books of Scotch ‘vocal poetry’ which appeared before his. The references to different authors are as minute and ample as those of the Universal History;—and how one single personage should have acquired so much knowledge of such a subject, we are at a loss to perceive. The history is closed with an account of the circumstances which induced the Editor to enter upon the present work. It was projected, we are told, in 1790; when Mr. Campbell was an organist in one of the Scotch Episcopal churches of Edinburgh; but it was not till very recently that he received sufficient encouragement to prosecute so laborious an undertaking. Many of the first personages in the United Kingdom now countenance the work; and the present volume is dedicated by permission, to the prince regent of England. Mr. Campbell performed a journey of between eleven and twelve hundred miles, and collected ‘one hundred and ninety-nine melodies and Gaelic vocal poetry.’ The tunes were taken down as they were sung by old men and old women, and afterwards furnished with the accompanying verses. The editor himself has written the greatest number: Mr. Hogg, with some others have contributed a few; and four are the productions of Mr. Scott. The poetry is, in Mr. Campbell’s estimation, quite subordinate to the music; and in most instances

indeed, it does not deserve to be more highly estimated: but there are some songs on the other hand, which would redeem a great deal of bad verse; and the two following Border Melodies written by Walter Scott would have been a valuable addition to his own collection of Minstrelsy. The first is called 'Jock of Hazeldean:'—

'WHY weep ye by the tide, ladie?  
Why weep ye by the tide?  
I'll wed you to my youngest son,  
And ye shall be his bride:  
And ye shall be his bride, ladie,  
Sae comely to be seen—'  
But aye she loot the tears down fa',  
For Jock of Hazeldean.

'Now let this wilful grief be done,  
And dry that cheek so pale;  
Young Frank is chief of Errington,  
And lord of Langley-dale;  
His step is first in peaceful ha',  
His sword in battle keen—'  
But aye she loot the tears down fa',  
For Jock of Hazeldean.

'O' chain o' gold ye shall not lack,  
Nor braid to bind your hair;  
Nor mettled hound, nor managed hawk,  
Nor palfrey fresh and fair;  
And you, the foremost of them a',  
Shall ride our forest queen—'  
But aye she loot the tears down fa',  
For Jock of Hazeldean.

The kirk was deck'd at morning-tide,  
The tapers glimmer'd fair;  
The priest and bridegroom wait the bride,  
And dame and knight are there.  
They sought her both by bower and ha',  
The ladie was not seen!  
She's o'er the border, and awa  
Wi' Jock of Hazeldean.

The other is 'Nora's Vow:'—

HEAR what Highland Nora said,  
'The Erlic's son I will not wed,  
Should all the race of nature die,  
And none be left but he and I.  
For all the gold, for all the gear,  
For all the lands, both far and near,  
That ever valour lost or won,  
I would not wed the Erlic's son.'  
'A maiden's vows,' old Callum spoke,  
'Are lightly made, and lightly broke;  
The heather on the mountain's height  
Begins to bloom in purple light;

The frost wind soon shall sweep away  
That lustre deep from glen and brae;  
Yet, Nora, ere its bloom be gone,  
May blythely wed the Erlie's son.'

'The swan,' she said, 'the lake's clear breast  
May barter for the eagle's nest;  
The Awe's fierce stream may backward turn;  
Ben-Cruaihan fall, and crush Kilchurn;  
Our kilted clans, when blood is high,  
Before their foes may turn and fly;  
But I, were all these marvels done,  
Would never wed the Erlie's son.'

Still in the water-lilies shade,  
Her wonted nest the wild swan made;  
Ben-Cruaihan stands as fast as ever;  
Still downward foams the Awe's fierce river;  
To shun the clash of foeman's steel,  
No Highland brogue has turn'd the heel;  
But Nora's heart is lost and won,  
She's wedded to the Erlie's son.

Two or three of Mr. Hogg's contributions are highly poetical; and the following Air is particularly marked with the simplicity and pathos which characterize the effusions of the Scottish Muse.

WHY should I sit and sigh,  
When the greenwood blooms sae bonny?  
Lavrocks sing, flow'rets spring,  
A' but me are cheery.  
Ochon, o ri! there's something wanting;  
Ochon, o ri! I'm weary;  
Nae young, blythe, and bonny lad,  
Comes o'er the knowe to cheer me.  
Ochon, o ri! there's something wanting, &c.

When the day wears away,  
Sair I look adown the valley,  
Ilka sound, wi' a stound,  
Sets my heart a thrilling;  
When I see the plover rising,  
Or the curlew wheeling,  
Then I trow some bonny lad  
Is coming to my sheeling.  
Ochon, o ri! there's something wanting, &c.

Come away, come away,  
Herd, or hind, or boatman laddie;  
I hae cow, kid, and ewe,  
Gowd and gear to gain thee.  
My wee cot is bless'd and happy;  
O 'tis neat and cleanly!  
Sweet the brier that blooms beside it,  
Kind the heart that's lanely.  
Ochon, o ri! there's something wanting, &c.

There is one air, composed by Mrs. Grant, which has great smoothness and harmony.

*O, my love, leave me not,  
O, my love, leave me not,  
O, my love, leave me not,  
Lonely and weary.*

Could you but stay a while,  
And my fond fears beguile,  
I yet once more could smile,  
Lightsome and cheery.  
Night with her darkest shroud,  
Tempests that roar aloud,  
Thunders that burst the cloud,  
Why should I fear ye!

Till the sad hour we part,  
Fear cannot make me start;  
Grief cannot break my heart;  
Whilst thou art near me.

Should you forsake my sight,  
Day would to me be night,  
Sad I would shun its light,  
Heartless and weary.

The three following stanzas are anonymous; but we think no person need be ashamed to own them.

O HUSH thee, my baby, thy sire was a knight;  
Thy mother a lady, both lovely and bright;  
The woods and the glens, from the towers which we see,  
They all are belonging, dear baby, to thee.

O fear not the bugle, though loudly it blows,  
It calls but the wardens that guard thy repose;  
Their bows would be bended, their blades would be red,  
Ere the step of a foeman drew near to thy bed.

O hush thee, my baby, the time soon will come,  
When thy sleep shall be broken by trumpet and drum.  
Then hush thee, my darling, take rest while you may,  
For strife comes with manhood, and waking with day.

Among his other collections our Editor happened to receive the following lampoon upon the fair sex:

THERE'S nothing so fatal as woman,  
To hurry a man to his grave;  
He may sigh and lament,  
He may pine like a saint,  
But still she will hold him her slave.

But a bottle, although 'tis quite common,  
The tricks of the sex will undo;  
It will drive from your head  
The delights of a bride:  
He that is drunk is too happy to woo!

But Mr. Campbell thinks no such thing. It is all scandal; and, in order to let his fair readers see that he dissents totally and altogether from his author, he takes up the pen and gives vent to his gallant mind in the following manner:

THERE'S naught so delightful as woman,  
 Delectable source of all joy!  
 When lovely and kind,  
 And possess'd of a *mind*,  
 She's, by Heavens! no trifling toy!  
 Of a truth ('tis disputed by no man),  
 Kind woman of life is the soul;  
 With delicate ease,  
 She fails not to please,  
 When she sways man with gentlest control.  
 O woman! bewitching, sweet woman!  
 Thou idol, whom all must adore!  
 Let virtue inspire,  
 Each hallowed desire,  
 Then, rule thou the world evermore!

There is, finally, no inconsiderable merit in this musical volume. Mr. Campbell is evidently a person of thorough-going industry; and though there is something quixotic in the solemnity with which he speaks of comparatively insignificant things, the general execution of the work does him as much honour as can well be attached to such an undertaking. Our fair readers have no occasion to regret that the music is not accessible; for if they will put any trust in *our* judgment on the subject, we can assure them that a Scotch Air is pounded all to pieces in a piano-forte.

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ART. VII.—*Intelligence in Science, Literature, and the Arts.*

1. *Inaugural Address, delivered in the Chapel of the University at Cambridge, December 11th, 1816.* By John Gorham, M. D., Erving Professor of Chymistry in Harvard University. Boston. Wells & Lilly. 1817. 8vo. pp. 23.
2. *Inaugural Address, delivered in the same place and on the same day.* By Jacob Bigelow, M. D., Rumford Professor in Harvard University. 1817. 8vo. pp. 24.

WE have been not a little gratified with the perusal of both these pamphlets;—though the one which stands first has pleased us a great deal the most. A Professorship of Chymistry and Materia Medica was established in Harvard College in 1783; and about eight years afterwards William Erving, Esq. bequeathed a thousand pounds, lawful money, for the support of that department. Dr. Gorham's Address was delivered on the occasion of his being installed in the chair. It is written in perspicuous and classical language; and contains the best sketch of the origin, revolutions, and present state of chymistry which we have recently had occasion to peruse. To the general reader such a brief and comprehensive tract is better than a half of a dozen volumes.

We now take up Dr. Bigelow's Address. Count Rumford died at Auteuil, near Paris, on the 21st of August 1814. But says our author—re-

*miniscitur Argos*—he remembered New England;\* for in his wills of September and October, 1812, and of October, 1813, he has bequeathed,—besides other legacies,—one thousand dollars annually, together with the reversion of other sums to the ‘University of Cambridge, in the state of Massachusetts, in North America, for the purpose of founding under the direction and management of the corporation, overseers, and government of that university, a new institution and professorship, in order to teach, by regular courses of academical and public lectures, accompanied with proper experiments, the utility of the physical and mathematical sciences, for the improvement of the useful arts, and for the extension of the industry, prosperity, happiness, and well being of society.’ Dr. Bigelow was elected in October last the first Rumford professor; and his Address was delivered at the inauguration in December. We shall not give any detail of its contents; as they are little more than a repetition of what we have often heard before,—an account of what the inhabitants of New England have done and what they are going to do for the sciences. We are sorry that Dr. Bigelow could not get along without so much repetition of *we* and *among us*; by which our readers must understand, he constantly means New England.

‘We have had little of the parade of operation, yet we have sometimes seen the fruits of silent efficiency and perseverance. We have had few learned men, but many useful ones. We have not often seen individuals among us, like the laborious Germans, spending their lives in endless acquisitions, while perhaps themselves add little to the general stock of knowledge; yet we have had men of original talents, who have been fortunate enough to discover some province in which they were qualified to be serviceable to their country and mankind. We have had ingenious mechanics, skilful projectors, profound mathematicians, and men well versed in the useful learning of their time. The progress of our internal improvements, and the high state of the mechanic arts among us, as well as in our sister states, has entitled us to the character of a nation of inventors. The individuals who have originated and promoted such improvements, have often been men unambitious of fame, whose lives have passed in obscurity; yet there have sometimes been those among us, whose labours have attracted the honourable notice of foreigners, and reflected lustre upon the country of their birth. It has even been our fortune to impose obligations on others, and there are services of our citizens which are now better known than their names. There are some things which, if gathered from the ashes of obscurity, might serve to shed a gleam upon our literary reputation, and to make known at least the light they have kindled for others. It is a fact perhaps not generally realized, that the American Philosophical Society at Philadelphia, the Royal Society of Great Britain, and the Royal Institution of London, all of them are in a measure indebted for their birth and first foundation to natives or inhabitants of New England.’

*Poems.* By Lord Byron. New York. 1817. 18mo. pp. 143.

THE longest poem in this collection is a Third Canto of Childe Harold’s Pilgrimage. It opens with the Pilgrim’s second departure from England;

‘Whither he knew not; but the hour’s gone by  
When Albion’s lessening shores could grieve or glad his eye.’

\* We have not adhered precisely to the doctor’s translation; for we question whether all the classical fraternity of Cambridge can make ‘dulces’ mean ‘rocky.’

He goes to Waterloo; writes some vigorous stanzas upon the subject; passes down the Rhine; describes its banks, as he describes every thing else,—with force and faithfulness; visits Lausanne; describes its lake, and there leaves us. It is impossible that lord Byron should ever write tamely; but we do not think this Third Canto is so good as the two others. The author's own sufferings and feelings engrossed so much of his thoughts that he had very little time for attention to any thing else. The most exquisite passage is his description of Leman.

‘ Clear, placid Leman, thy contrasted lake,  
With the wide world I dwelt in, is a thing  
Which warns me, with its stillness, to forsake  
Earth's troubled waters for a purer spring.  
This quiet sail is as a noiseless wing  
To waft me from distraction; once I loved  
Torn ocean's roar, but thy soft murmuring  
Sounds sweet as if a sister's voice reproved,  
That I with stern delights should e'er have been so moved.

‘ It is the hush of night, and all between  
Thy margin and the mountains, dust, yet clear,  
Mellowed and mingling, yet distinctly seen,  
Save darken'd Jura, whose cap heights appear  
Precipitously steep; and drawing near,  
There breathes a living fragrance from the shore,  
Of flowers yet fresh with childhood; on the ear  
Drops the light drip of the suspended oar,  
Or chirps the grasshopper one good-night carol more.

‘ He is an evening reveller, who makes  
His life an infancy, and sings his fill;  
At intervals, some bird from out the brakes,  
Starts into voice a moment, then is still.  
There seems a floating whisper on the hill,  
But that is fancy, for the starlight dews  
All silently their tears of love instil,  
Weeping themselves away, till they infuse  
Deep into Nature's breast the spirit of her hues.

‘ All heaven and earth are still,—though not in sleep,  
But breathless, as we grow when feeling most;  
And silent, as we stand in thoughts too deep:—  
All heaven and earth are still: From the high host  
Of stars, to the lull'd lake and mountain-coast,  
All is centered in a life intense,  
Where not a beam, nor air, nor leaf is lost,  
But hath a part of being, and a sense  
Of that which is of all Creator and defence.’

As a contrast we should have extracted the stanza which describes a storm upon the lake,—were it not concluded in the following lame and impotent line:—The mountains shake their sides

‘ As if they did rejoice o'er a young earthquake's birth.’

Of the other poems in this volume, *The Prisoners of Chillon*, a fable, is by far the best. Besides this there are a Sonnet to Chillon, an Apostro-

phe to Rousseau—Voltaire—Gibbon—and De Stael, Stanzas to ———, Darkness, Churchill's Grave, The Dream, The Incantation, and Prometheus;—of all which the one called Darkness bears the most characteristic marks of lord Byron's genius. We never recollect to have read any eighty lines which contained more vigour and imagination.

'I had a dream, which was not all a dream.  
The bright sun was extinguish'd, and the stars,  
Did wander darkling in the eternal space,  
Rayless, and pathless, and the icy earth  
Swung blind and blackening in the moonless air;  
Morn came and went—and came and brought no day,  
And men forgot their passions in the dread  
Of this their desolation; and all hearts  
Were chill'd into a selfish prayer for light:  
And they did live by watchfires—and the thrones,  
The palaces of crowned kings—the huts,  
The habitations of all things which dwell,  
Were burnt for beacons; cities were consumed,  
And men were gathered round their blazing homes  
To look once more into each other's face;  
Happy were those who dwelt within the eye,  
Of the volcanos, and their mountain-torch:  
A fearful hope was all the world contain'd;  
Forests were set on fire—but hour by hour  
They fell and faded—and the crackling trunks  
Extinguish'd with a crash—and all was black.  
The brows of men by the despairing light  
Wore an unearthly aspect, as by fits  
The flashes fell upon them; some lay down  
And hid their eyes and wept; and some did rest  
Their chins upon their clenched hands, and smiled;  
And others hurried to and fro, and fed  
Their funeral piles with fuel, and looked up  
With mad disquietude on the dull sky,  
The pall of a past world; and then again  
With curses cast them down upon the dust,  
And gnash'd their teeth and howl'd: the wild birds shriek'd,  
And, terrified, did flutter on the ground,  
And flap their useless wings; the wildest brutes  
Came tame and tremulous; and vipers crawl'd  
And twined themselves among the multitude,  
Hissing but stingless—they were slain for food:  
And war, which for a moment was no more,  
Did glut himself again;—a meal was bought  
With blood, and each sate sullenly apart  
Gorging himself in gloom: no love was left;  
All earth was but one thought—and that was death,  
Immediate and inglorious; and the pang  
Of famine fed upon all entrails—men  
Died, and their bones were tombless as their flesh;  
The meagre by the meagre were devoured,  
Even dogs assail'd their masters, all save one,  
And he was faithful to a corse, and kept  
The birds and beasts and famish'd men at bay,

Till hunger clung them, or the dropping dead  
 Lured their lank jaws; himself sought out no food,  
 But with a piteous and perpetual moan  
 And a quick desolate cry, licking the hand  
 Which answered not with a caress—he died.  
 The crowd was famish'd by degrees; but two  
 Of an enormous city did survive,  
 And they were enemies; they met beside  
 The dying embers of an altar-place  
 Where had been heap'd a mass of holy things  
 For an unholy usage; they raked up,  
 And shivering scraped with their cold skeleton hands  
 The feeble ashes, and their feeble breath  
 Blew for a little life, and made a flame  
 Which was a mockery; then they lifted up  
 Their eyes as it grew lighter, and beheld  
 Each other's aspects—saw, and shriek'd, and died—  
 Even of their mutual hideousness they died,  
 Unknowing who he was upon whose brow  
 Famine had written Fiend. The world was void,  
 The populous and the powerful was a lump,  
 Seasonless, herbless, treeless, manless, lifeless—  
 A lump of death—a chaos of hard clay.  
 The rivers, lakes, and ocean all stood still,  
 And nothing stirred within their silent depths:  
 Ships sailorless lay rotting on the sea,  
 And their masts fell down piecemeal; as they dropp'd  
 They slept on the abyss without a surge—  
 The waves were dead; the tides were in their grave,  
 The moon, their mistress, had expired before;  
 The winds were wither'd in the stagnant air,  
 And the clouds perish'd; Darkness had no need  
 Of aid from them—She was the universe.'

## ERRATUM.

Page 116, line 8 from the bottom, for *military* read *miliary*.